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14. ABSTRACT

Evans Army Community Hospital (EACH) in Colorado Springs, Colorado is a 34 bed community hospital that currently provides 28 Medical/Surgical inpatient beds, 6 ICU beds, and full spectrum outpatient elinical services (Table 1). EACH maintained inpatient mental health services until fiscal year (FY) 2000 when it was dctermined that insufficient workload existed to maintain the service. In the years following the Global War on Terrorism (GWOT), EACH experienced a significant increase in the amount of inpatient mental health purchased in the Colorado Springs health eare market. This Business Case Analysis (BCA) provides the command team of EACH the likely costs and benefits assoeiated with implementation of inpatient mental health serviees. The project compares the return on investment (ROI) of two work-load recapture initiatives compared to maintaining the status quo. Preliminary analysis indicates a positive ROI under scenarios two and three within the first two years of implementation.

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Army-Baylor University Graduate Program in Health and Business Administration

Graduate Management Project Proposal
Inpatient Mental Health Recapture
A Business Case Analysis at
Evans Army Community Hospital
Fort Carson, Colorado

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7 August 2009

Preface

Disclosure Statement

The opinions or assertions contained herein are the private views of the author and are not to be construed as official or reflecting the views of Evans Army Community Hospital (EACH), Baylor University, the U.S. Department of the Army, the U.S. Department of Defense, or the U.S. Government

This report provides a basis for evaluating potential costs and savings associated with relocation of inpatient mental health services to Evans Army Community Hospital. The report is based on data obtained from MHS Mart, Tri-West, HFPA, and local EACH resources/departments. It is highly recommended that this data be utilized by command authority in developing additional research into recapture of inpatient mental health services within the DoD brick and mortar facility. In no way is this BCA intended to serve as the sole official research document to proceed with recommendations enclosed within.

ACKNOWLEDGMENTS

"We sleep safely in our beds because rough men stand ready in the night to visit violence on those who would harm us."
- George Orwell

I wish to thank the following, the gracious Lord, every honorable military service member, the superior Evans Army Community Hospital Staff, my beautiful wife, my wise preceptor Mike Wheeler MHA, my patient new faculty reader MAJ Brad Beauvais Ph.D, MBA, MA., and everyone else that has assisted me in this endeavor.

Executive Summary

Evans Army Community Hospital (EACH) in Colorado Springs, Colorado is a 34 bed community hospital that currently provides 28 Medical/Surgical inpatient beds, 6 ICU beds, and full spectrum outpatient clinical services (Table 1). EACH maintained inpatient mental health services until fiscal year (FY) 2000 when it was determined that insufficient workload existed to maintain the service. In the years following the Global War on Terrorism (GWOT), EACH experienced a significant increase in the amount of inpatient mental health purchased in the Colorado Springs healthcare market.

The purpose of this Business Case Analysis (BCA) is to provide the Evans Army Community Hospital, and the Multi-Service Market Office (MSMO) with a current look at the potential costs and benefits of recapturing inpatient mental health services within the EACH existing footprint. This BCA will provide the command with a detailed list of potential costs as well as benefits associated with the recapture of this service line. This BCA will compare the costs associated with continuing the status quo with those associated with recapturing an inpatient mental health service, and determine which provides a greater potential return on investment (ROI).

Conclusions and Recommendations

Evans Army Community Hospital is currently hemorrhaging money for inpatient mental health services within the Colorado Springs marketplace. Considering the amount of money paid out for these services and the analysis provided in this BCA the hospital should consider implementation of a recapture initiative. A positive return on investment is possible with either scenario two or three, and it is recommended that the hospital look at implementation of scenario two. Scenario two provides for recapture of ADSM which is currently the OTSG/MEDCOM priority group for mental health services provided in

the MTF. In addition to recapture of ADSM under scenario two, the civilian network can be assuaged by the fact that Family Members, Retirees, and others will continue to be referred to their facilities for treatment.

Implementation of scenario two would have less of an impact on the limited facility space and hypothetically be ready to receive patients on or about March of 2011 under current renovation and movement plans. More expedient processing is possible in the event that the commander is able to move out the current occupants of 4-West or similar sized space prior to the August 2010 occupancy dates of the SFCC. For example, should 4-West be vacated by October 2009 then the first patient could be admitted on or about the summer of 2010.

Non-financial benefits of recapturing ADSM inpatient psychiatric services are also a positive factor in considering implementation of scenario two. As previously discussed, continuity of care is a very significant issue when dealing with return to fitness for duty. Service members can be followed closely from inpatient to outpatient status by the same behavioral health team, and be afforded a military environment in which to recover and rehabilitate. Treatment and rehabilitation efforts are significantly more successful when Soldiers can identify with other patients in the therapy. Assignment of patient mentor's for amputee and burn patients within the DoD is a great example of the success of having Soldiers helping Soldiers. Providing care for service-members within the MTF has both a positive ROI in financial terms, but also in staff resiliency and return to duty rates.

Demand for inpatient psychiatric services is on the rise for both ADSM and ADFM and now is a good time to consider recapturing this service line within the MTF. This BCA considered recapture of inpatient psychiatric services without the assistance or funding from U.S. Air Force (USAF) or the VA Eastern Colorado Healthcare System

(VAECHCS). EACH leadership could consider a VA Sharing agreement in order expand upon scenario three, but that would require a larger facility, or separate one, than is currently available within the EACH facility. This analysis can be utilized as a starting point for discussions between the EACH Behavioral Health leadership and the Commander to pursue possible recapture of services. Financial benefits of pursuing a recapture initiative are potentially very favorable, but continuity of care, access to care, and positive outcomes are the true goal of this initiative for the physician and patient.

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Inpatient Mental Health Recapture: A Business Case Analysis

A. Introduction

The Colorado Springs Military Community consists of approximately 100,000 TRICARE Prime enrolled beneficiaries across three Department of Defense (DoD) Military Treatment Facilities (MTF). Behavioral health services are made available to eligible beneficiaries in both inpatient and outpatient settings within both the DoD and civilian network facilities. Evans Army Community Hospital provides comprehensive medical care to approximately 50,000 total enrolled beneficiaries. In addition to directly enrolled beneficiaries EACH is responsible to providing care to beneficiaries referred for specialty services from both the 10th Medical Group (10MDG), at the United States Air Force Academy (USAFA) clinic, and 21st Medical Group (21MDG), at the Peterson Air Force Base Clinic. This responsibility stems from a longstanding relationship between the military medical facilities within the Colorado Springs, Colorado metropolitan service area. Evans Army Community Hospital, the 10th Medical Group at the USAFA, and the 21st Medical Group at Peterson Air Force Base are part a Multi-Service Market and have Memorandums of Agreement between them that spell out what services they share.

The lack of inpatient mental health services at Evans Army Community Hospital resulted in 15, 964 bed days of purchased care mental health services in FY 2008 (TriWest, 2008). These inpatient bed days included acute behavioral health, residency treatment centers, and substance abuse admissions. The services are provided by over 12 major civilian institutions. Variability in the number of bed days per admission is such that the accepted standard for workload measurement and capacity is the number of bed days. TriWest is the TRICARE Support Contractor responsible for management of the

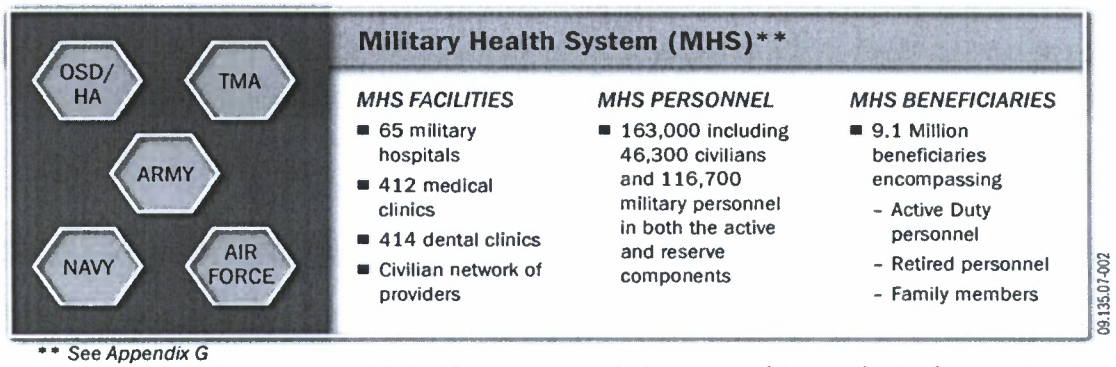
TRICARE Network services provided to DoD beneficiaries receiving care within the TRICARE Western Region, which includes the Colorado Springs civilian market. TriWest routinely gathers data on purchased sector care as part of the contract and this BCA will utilize their claims data in addition to the Military Health System Mart (M2) data. This BCA will focus on purchased sector care for inpatient mental health services with an ICD9 diagnostic code range of 290 – 319. In addition to utilization of this diagnostic code range the data will focus on provider zip codes that fall into the Pikes Peak (all 3 MTF catchments) region.

In addition to providing an analysis of workload data purchased sector inpatient mental health this BCA will provide an overview of the Military healthcare benefit to enrolled beneficiaries, and a review of the planned expansion and growth of the Fort Carson force structure and medical services under BRAC law and GTA initiatives.

A.1. The Military Health System and the Behavioral Health Entitlement

TRICARE Management Activity (TMA) and the Military Health System (MHS) executed a budget of $38.7 billion dollars for FY 2008. (Grimes, 2008) This budget provides care for 9.1 million beneficiaries and covers all Active Duty, Retired, and Family Members. Figure 1 provides an organizational overview of the MHS and gives a proper scope to the organization responsible for ensuring timely delivery of quality healthcare.

Figure 1: Military Health System (MHS)

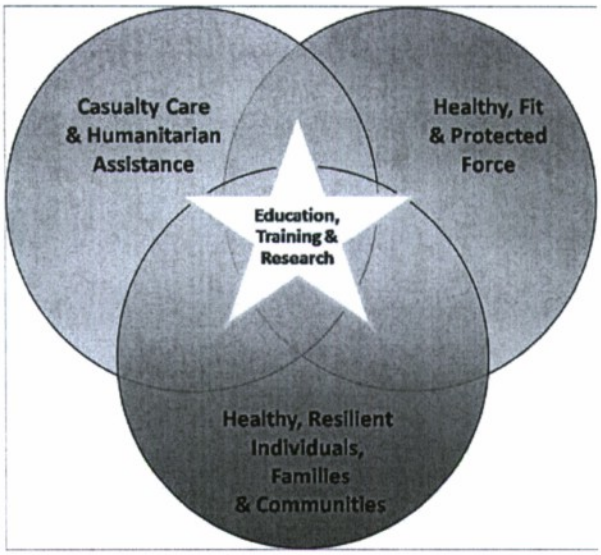


** See Appendix G

Source: 9/11/07 - http://www.TRICARE.mil/pressroom_facts.aspx / MHS Human Capital Strategic Plan 2008-2013

The mission of the MHS is to "provide optimal Health Services in support of our nation's military mission – anytime, anywhere." (www.health.mil/strategicplan) Figure 2 is the graphical representation of the MHS mission in action. The MHS assists the command to create and sustain a healthy, fit, and medically protected force in order to deploy and fight the nation's battles. Sustainment of the medical mission is reliant upon flexibility of the medical infrastructure to the environment in which our Soldiers are placed. Long term care of our military beneficiaries and family members is accomplished in coordination with the Department of Veterans Administration and other DoD partnerships. The MHS is the only medical system that is responsible to maintain a deployable, agile medical force that can deliver quality medical care under austere conditions. The MHS is a state of the art organization that is responsible for caring for not only our nation's Soldiers, but also family members, retirees, and often enemy combatants and civilians on the battlefield (COB). The vision of the MHS is, "A world-class health system that supports the military mission by fostering, protecting, sustaining, and restoring health" (www.health.mil)

Figure 2: MHS Strategic Plan



Source: www.health.mil/strategicplan

TRICARE enrolled beneficiaries are entitled to robust set of behavioral health benefits including: psychotherapy, acute inpatient psychiatric care, partial hospitalization, residential treatment center care, treatment for substance use disorders (detoxification, rehabilitation, outpatient group therapy, Family Therapy), and medication management (http:www.TRICARE.mil). TRICARE beneficiaries are highly encouraged to take advantage of this comprehensive behavioral health entitlement due to the stressful nature of the Armed Forces. The MHS often must rely upon the TRICARE network to provide most of these services as behavioral health services in the MTFs are generally very limited or often unavailable.

Behavioral healthcare is provided by a combination of licensed professional counselors (LPCs), licensed mental health counselors (LMHCs), psychiatrists, psychologists, social workers, marriage and family therapists, certified psychiatric nurse specialists, and pastoral counselors. The majority of outpatient behavioral healthcare requires pre-authorization from the patient's primary care manager (PCM), but acute inpatient psychiatric care is considered an emergency admission and is exempt from this

requirement. For active duty service members extra caution and tracking is mandatory in order to maintain medical readiness and optimal treatment.

The DoD has recognized behavioral health as an area of special emphasis for both the active duty service member and their family as a result of Operations Enduring and Iraqi Freedom (OEF/OIF). To better provide these services to the Soldier and family member the DoD has taken strong measures to reduce the barriers to access. Specifically, family members are entitled to up to 8 outpatient psychotherapy visits without having to seek approval from the MTF of enrollment or TRICARE. This access standard was designed to provide a higher level of confidentiality to the patient seeking counseling and treatment. For active duty Soldiers the Army has launched several media campaigns to reduce any stigma associated with seeking behavioral health counseling and treatment. A large impetus behind the focus on behavioral health services offered was an increase in the amount of mental health diagnosis and suicides among our Armed Forces.

In a suicide prevention campaign the Army senior enlisted man, CSM Preston, clearly charged every Soldier to be a part of the prevention of suicides among our Soldiers. He stated that, "Untreated depression is the number one cause of suicide", and charged every Soldier with the responsibility under the "Ask, Care, Escort" (ACE) program to do their part. According to statistics, 2008 was the fourth consecutive year the Army suicide rates have increased. (www.army.mil/-newsreleases) 2008 was the highest suicide rate at 128 among Army Soldiers since record keeping began for military suicides in the 1980's (Kaiser, H. 2009). Additionally, the suicide rate per 100,000 Soldiers (20.2) exceeded the rate of suicides among the civilian population with similar demographics (19.2). This phenomenon is the first time that the Army suicide rate exceeded the civilian community since the Vietnam War (Kaiser, H. 2009). The Vice

Chief of Staff, LTG Chiarelli, was tasked by the Army Chief of Staff, General Casey, to lead the efforts to reduce suicides.

Part of the Army efforts in the behavioral health arena was the increase of treatment options available to service members and enrolled beneficiaries. As part of the re-deployment from combat operations all Soldiers are required to undergo a mental health screening. Additionally, the Army leadership placed a large emphasis on removing "the stigma associated with seeking mental health care. We need to help our Soldier's and family members understand that it's OK to ask for help", LTG Chiarelli.

B. Background

B.1. Evans Army Community Hospital

Evans Army Community hospital was established in 1942 and was designed to provide a bed capacity of 1,726 with an expansion to 2,000 beds. The hospital served as a convalescent hospital during WWII and in 1945 was re-designated as a hospital center. The patient volume steadily diminished over the years and the hospital underwent a series of changes to include a new facility in 1986 with a 400 bed authorization. In 1986 the name was changed to Evans Army Community Hospital in honor of Specialist Four Donald W. Evans, Jr., a member of Company A, 2nd Battalion, 12th Infantry, 4th Infantry Division. Specialist Evans was awarded the Medal of Honor for action at Tri Tam, Republic of Vietnam, where he gave his life while administering medical aid to his fellow soldiers.

The hospital is comprised of two distinct buildings separated by a glassed Commons Area. The five-story Tower at the front of the hospital houses all Inpatient Units, the Operating Suite, the Delivery Suite, Nursery, Radiology, Occupational Therapy, Physical Therapy, Emergency Room, and the Nutrition Care Division. The

two-story Clinic Building contains all Outpatient Clinics, the Command Suite, and other administrative support functions. The Commons Area, which provides the main entries into the building, also houses patient service activities such as Outpatient Records, Outpatient Pharmacy, Admissions and Dispositions, Hospital Treasurer, PX, Barber Shop and Chapel. (http://www.evans.amedd.army.mil)

The hospital's mission is "To deliver on the promise of quality, safe, and timely Warrior and Family Centered Care" and the mission essential task list is to: 1. Deploy a healthy force, 2. Deploy in support of the force, 3. Execute an Army Medical Action Plan that returns the Warrior in Transition to the force or successfully transitions the veteran to civilian life, and to 4. Manage care of the total Army Family. An important portion of this BCA is the projected growth of the enrolled population. While table 1 provides the current list of services offered, table 2 provides a review of the TRICARE enrollment and projected increases under BRAC and GTA according to TriWest. The hospital is currently configured to provide the following patient services:

Table 1: Evans Army Community Hospital Clinical Services

OB/GYN	Pharmacy	Nutrition Care
Internal Medicine	Pediatrics	Disease Management
Dermatology	Cardiology	Family Medicine Clincs
Anesthesia	Pain Clinic	Gastroenterology
Orthopedics	PACU/SDS	Urology
Labor & Delivery	Neurology	EENT
Radiology	Surgery	PT/OT
Chiropractic	Pathology	Behavioral Health
Preventive Medicine	Medical Surgical Inpatient	Intensive Care Inpatient
Army Substance Abuse	Social Work Services	Medical Evaluation Board
Emergency Services	Traumatic Brain Injury	Allergy Clinic
Pulmonary/Respiratory	Chaplain	Family Advocacy

Source: Evans Army Community Hospital Organization Chart (www.evans.army.mil)

Table 2: Ft. Carson Projected Enrollment

	FY2008	FY2009	FY2010	FY2011	FY2012
Total Annual Increases	Baseline	10,670	1,881	8,697	268
Total ADSM & ADFM Projected Enrollment	37,900	48,570	50,451	59,148	59,416
Total MTF Projected Enrollment	51,451	62,121	64,002	72,699	72,967

Source: TriWest JSOPP, March 15, 2009

B.2. EACH Behavioral Health Services

The Behavioral Health Clinic at EACH provides the following outpatient services: psychiatric clinic, psychology clinic, social work services, family advocacy, and Army substance abuse program (ASAP). Mental health providers at EACH focus primarily on the active duty service member due to space and subsequent staffing limitations. The clinic is currently staffed with 13 psychiatrists, 12 psychologists, and 4 nurses. The clinic currently provides an average of 4,000 outpatient appointments per month and is currently running a scheduling template that is booked 1-2 weeks out.

Inpatient Psychiatric Services (Network)

The inpatient mental health service at EACH was formally closed in FY 2001 due to a low daily census and increasing costs to maintain the ward. In FY 2001 the average daily census was 5 patients and the average number of daily admissions was 1. With an average length of stay of 4 days at $984 dollars a day the costs quickly became an issue for the leadership at the time as the champus maximum allowable charge (CMAC) rate for these services on the local network was $660 per day. (TriWest, 2004 BCA). The decision to close the inpatient mental health unit resulted in an expansion of the TRICARE network which was capable of providing required services within a 10 mile radius of the installation.

The major network providers of inpatient mental health services are listed below in Table 3. This workload data in Bed Days was extracted from the March 15, 2009 Joint Strategic and Operational Planning Process (JSOPP) that TriWest provided to the Command. This data is extracted from claims paid to the provider and includes all TRICARE Prime enrolled beneficiaries. FY 2008 costs for all categories of inpatient mental health totaled $10,975,855 (Amount Paid).

Table 3: Inpatient Behavioral Health Bed Days (Network)

Provider Name	Behavioral Health Care Category	Provider Zip Code	Bed Days
CEDAR SPRINGS BEHAVIORAL HEALTH	Acute Behavioral Health	80906	4,581
	RTC	80906	3,707
	Substance Abuse	80906	3,737
CENTURA PENROSE- ST FRANCIS MEDICAL CENT	Substance Abuse	80917	8
COLORADO MENTAL HEALTH	Acute Behavioral Health	81003	48
INTERIM HEALTHCARE OF SOUTHEASTERN COLOR	Acute Behavioral Health	81003	35
MEMORIAL HOSPITAL	Acute Behavioral Health	80909	10
	Substance Abuse	80909	53
PARKMOOR VILLAGE-CO SPGS	Substance Abuse	80917	19
PARKVIEW MEDICAL CENTER	Acute Behavioral Health	81003	273
	Substance Abuse	81003	1,249
PENROSE HSP PSY UNIT	Acute Behavioral Health	80907	47
PENROSE ST FRANCIS HEALTH SYSTEM PSYCHIA	Acute Behavioral Health	80903	631
	Substance Abuse	80903	14
PENROSE ST FRANCIS HEALTH SYSTEM SHORT T	Acute Behavioral Health	80917	1
	Substance Abuse	80907	9
		80917	8
PIKES PEAK MENTAL HEALTH CENTER SYSTEMS	Acute Behavioral Health	80910	725
	Substance Abuse	80910	797
TERRACE GARDENS HEALTH CARE CENTER	Substance Abuse	80910	12
Grand Total Bed Days			15,964

Source: Joint Strategic and Operational Planning Process, TriWest and TRO-West, 2009

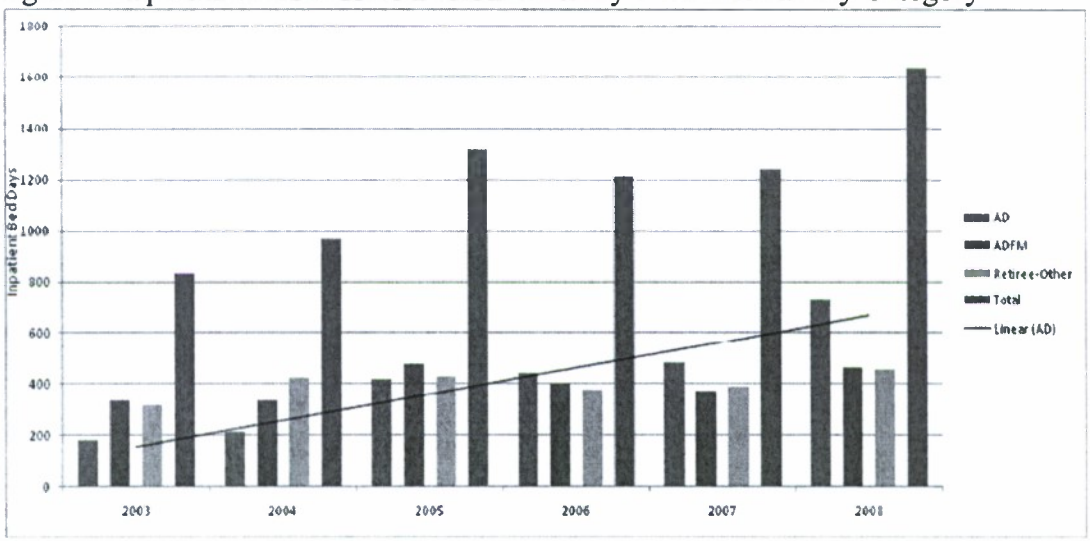
B.3. Conditions Prompting the Business Case Analysis

Soldiers are receiving inpatient treatment for mental health conditions at an increasing rate. The high operational tempo of our combat forces is taking a toll on both the physical and mental resilience of the armed forces. Up to one third of all returning Soldiers from OIF/OEF receive some form of mental health care in the first year after returning from combat operations (www.behavioralhealth.army.mil). This treatment covers a broad range of services, but the main point is that the need for behavioral health services is continuing to increase based on review of behavioral health utilization data. Some of the most common diagnoses for returning Soldiers are: adjustment reactions,

depression, anxiety disorders, and alcohol and substance related problems (www.behavioralhealth.army.mil).

In addition to the increase in Soldiers with needs for outpatient behavioral health services, the Ft. Carson enrolled beneficiary population has experienced an increase in the amount of inpatient mental health treatment. Figure 3 illustrates the number of admissions by beneficiary category and serves as another significant condition prompting this study.

Figure 3: Inpatient Mental Health Admissions by Year/Beneficiary Category



Source: MHS Mart data pulled on 16 June 2009

The rising costs associated with treating behavioral health conditions serves as the third condition prompting this study. In addition to fiscal reasons for conducting this BCA there are concerns regarding treatment outcomes for our beneficiary population receiving care for these types of conditions. This increase in mental health admissions carries a significant cost. For example, table 4 is a break-down of inpatient mental health costs by these groupings for all inpatient mental health treatment by amount paid for fiscal years 2003 through 2008. This BCA will provide further analysis of inpatient mental health services for Fiscal Years 2005-2008. The BCA will provide projected bed

days for FY 2011 and beyond based on population increases at Fort Carson under grow the Army (GTA) and base realignment and closure (BRAC) legislation.

Table 4: Inpatient mental health purchased care by year and beneficiary category

AMOUNT PAID	2003	2004	2005	2006	2007	2008
AD	$359,954.74	$520,328.22	$1,327,828.12	$1,618,203.79	$1,812,481.60	$5,044,760.55
ADFM	$1,303,636.21	$1,098,003.54	$1,818,504.64	$1,933,223.50	$2,142,829.75	$3,607,255.08
RETIREES, OTHERS	$683,232.89	$1,229,431.19	$1,277,160.66	$1,252,056.60	$1,603,426.52	$2,323,839.16
TOTALS	**$2,346,823.84**	**$2,847,762.95**	**$4,423,493.42**	**$4,803,483.89**	**$5,558,737.87**	**$10,975,854.79**

Source: MHS Mart pulled on 18 June 2009

C. Methods and Procedures

C.1. Scope

The business case analysis covers a five year period beginning FY 2011 (01 October 2010) thru FY15 (30 September 2015). This analysis is based on the scheduled timeline for completion of the Soldier Family Care Clinic (SFCC) and other renovations associated with the GTA/BRAC expansion of services at EACH.

C.2. Scenarios for Inpatient Mental Health (recapture) at Fort Carson

Based on the purchased care data in the above table the following courses of action (COA) / scenarios are examined under this BCA project. The value of expected benefits and costs for this recapture initiative is developed from a comparison of three scenarios: 1) Continuing business as usual (status quo), 2) Convert one of the hospital's existing inpatient spaces to inpatient mental health beds to recapture active duty only acute inpatient mental health 3) Convert one of the hospital's existing inpatient spaces to recapture all TRICARE Prime enrollees.

C.2a. Scenario 1 – Current Operations

Under this scenario the hospital will continue to operate under business as usual conditions. All patients requiring inpatient mental health services would continue to be referred to the local civilian healthcare network.

C.2b. Scenario 2 – Renovation / recapture of Active Duty only

Under this scenario the hospital will recapture all Active Duty (AD) inpatient mental health treatment. This recapture initiative is focused on two main categories of services, Acute Behavioral Health (ABH), and Substance Abuse (SA) treatment that are currently referred within the Colorado Springs metropolitan area. The hospital will renovate an existing inpatient ward in accordance with Health Facility Planning Agency (HFPA) and Department of Defense (DoD) standards. In addition to facility renovations the hospital will be required to hire an entirely new behavioral health staff to provide care for AD patients.

C.2c. Scenario 3 – Renovation / Recapture of all TRICARE Prime Enrollees

Under this scenario the hospital will recapture all TRICARE Prime enrollees inpatient mental health treatment. This recapture initiative is an expansion of scenario two in that it seeks to recapture all prime enrolled beneficiaries. This scenario focuses on the same two main categories of services, Acute Behavioral Health (ABH), and Substance Abuse (SA) treatment that are currently referred within the Colorado Springs metropolitan area. The hospital will renovate a larger inpatient ward space in accordance with Health Facility Planning Agency (HFPA) and Department of Defense (DoD) standards to accommodate this larger recapture initiative. In addition to a larger facility requirement the hospital will be required to hire an behavioral health staff twice as large as scenario two.

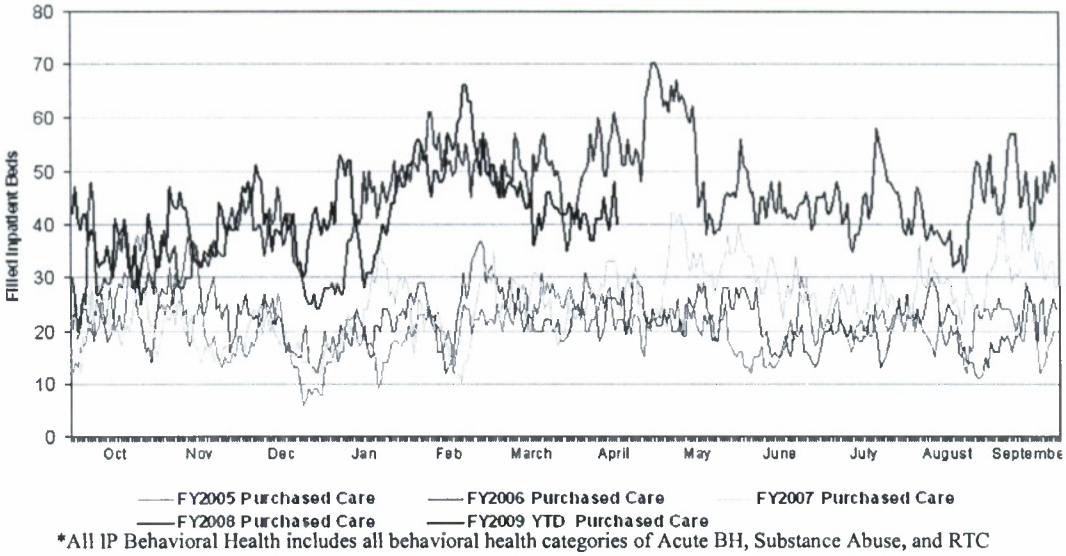
C.3. Data

The MHS Mart (M2) is the AMEDD's primary source for utilization and cost data for all services provided to enrolled beneficiaries. In addition to M2, this BCA utilizes data from TriWest as they are the contracting agency responsible for tracking network purchased care for EACH. TriWest data is based on claims paid to local network providers and is similar to M2 output. Costs associated with staffing each COA are based on current hiring costs extracted from the civilian personnel on-line (CPOL) system and in conjunction with the Department of Behavioral Health leadership at Fort Carson. The number of inpatient beds for each COA is based on the average number of bed days paid from TRICARE claims data

C.3.a Scenario 1 Data

Inpatient mental health utilization data is obtained from claims paid in both TriWest and M2 database system. Projected increases in services purchased in the civilian marketplace are extracted from the March 15, 2009 JSSOP which was conducted to analyze health plan demand, capacity, and gap analysis for Behavioral Health services by TriWest. Projected utilization trends through 2011 use 2008 utilization rates for Ft. Carson enrolled ADSM and ADFM multiplied by the increases expected under BRAC and GTA. TriWest projections use bed days as the measure of demand based on the high variability of bed days per admission. A more accurate assessment of demand is obtained by taking the number of beds occupied each day as opposed to the average length of each patient stay. According to TriWest projections in figure 4 the number of inpatient bed days purchased increases by 2,558 in 2009 and 5,094 by 2011.

Figure 4: All Inpatient Behavioral Health Bed Days*



*All IP Behavioral Health includes all behavioral health categories of Acute BH, Substance Abuse, and RTC

Source: TriWest March 15, 2009 JSOPP

This projected increase for inpatient behavioral health is significant considering that $10.9 million dollars was spent in FY 2008 (M2). The average projected number of bed days for all three major categories of inpatient mental health treatment from the TriWest study exceeds 60 beds filled per day and peaks above 90 bed days in the months of April and May based on historical workload from FY 2008. After further analysis by TriWest the average number of ABH beds required on a daily basis is approximately 29. This number accounts for all enrolled beneficiary categories assigned to the hospital and catchment area. The average number of substance abuse beds required is 21, and the average number of residential treatment beds is 13 (TriWest, 2009). Based on interviews conducted with local providers by TriWest the civilian marketplace has expressed a willingness to add additional inpatient mental health services to meet the projected demand. Under this course of action there are no additional inpatient staffing or facility renovation costs.

C.3.b Scenario 2 Data

In order to procede with scenario 2 this BCA must establish what the existing workload for Active Duty Service Members (ADSM) is currently being purchased within

the Colorado Springs metropolitan area. Services purchased are broken down into three main categories: Acute Behavioral Health (ABH), Residential Treatment Center (RTC), and Substance Abuse (SA). To more clearly understand the clinical diagnoses resulting in admission this BCA will utilize Annex B provided by TriWest. As the average length of stay for a RTC patients is too long at 39.4 days (TriWest, 2008) this BCA will not focus on this population. Both proposal 2 and 3 will focus on ABH and SA admissions with an average length of stay (ALOS) of 6.5 and 15.7 days respectively.

Data collection for purchased care workload was extracted from M2 on June 18, 2009. Annex D is the screen capture from M2 displaying the exact code sets used. Annex B contains the full range of diagnostic codes used by TriWest in pulling data for market analysis under the JSOPP. This BCA will utilize both M2 and TriWest data in determining the amount of workload purchased from the major network providers in the Colorado Springs market (Table 2). Table 5 contains an abbreviated listing of the number of inpatient admissions, sum of bed days, ALOS and amount paid per claim for ADSM receiving inpatient mental health treatment.

Table 5: AD Inpatient (Alcohol/Drug Induced Organic Mental Disorders and Mental Disease and Disorders combined (MCD 19&20)

Year	Admissions	Sum of Bed Days	ALOS	Amt. Paid
2003	181	760	4.19	$349,479.27
2004	210	978	4.65	$520,328.22
2005	417	2016	4.83	$1,210.985.05
2006	439	2441	5.56	$1,618,203.79
2007	480	2603	5.42	$1,812,481.60
2008	723	6630	9.17	$4,925,128.94

Source: MHS Mart, 18 June 2009

Table 6 contains a list of services broken down by either Mental Disease & Disorders (MDC 19) or Alcohol/Drug Use & Alcohol/Drug Induced Organic Mental Disorders (MDC 20). Breaking it down further by these two categories provides a more detailed look at the type and amounts paid out per diagnostic range.

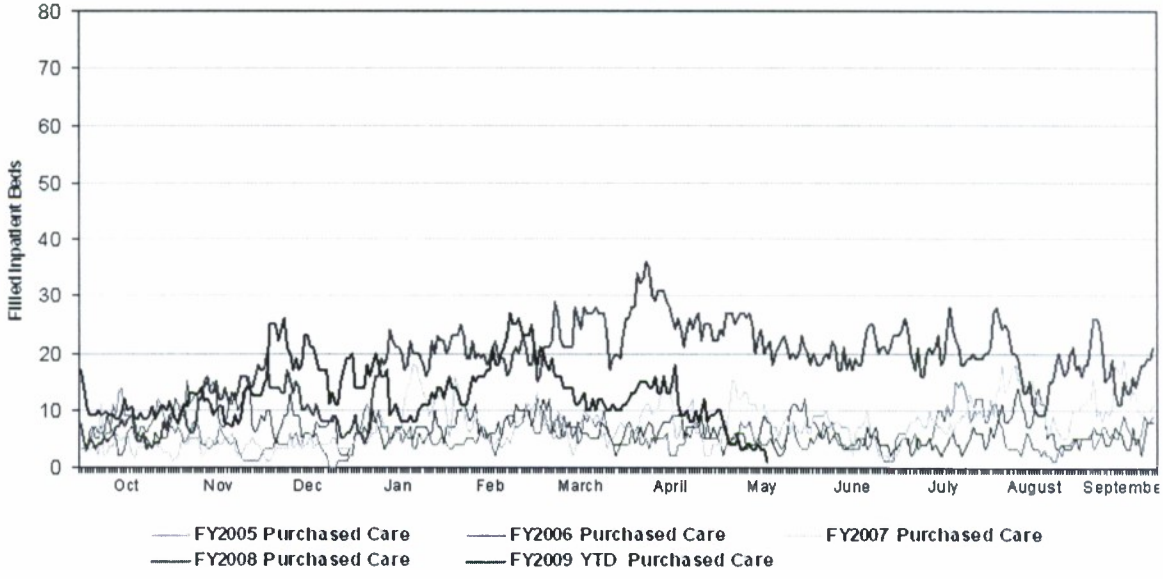
Table 6: AD Inpatient (Alcohol/Drug Induced Organic Mental Disorders and Mental Disease and Disorders separated (MCD 19&20)

Year	MDC 19 Admission	ALOS	Amt. Paid	MDC 20 Admission	ALOS	Amt. Paid
2003	149	4	$269,110.13	32	5.125	$80,369.14
2004	176	4.51	$426,593.22	34	5.38	$93,735.00
2005	326	4.83	$944,192.27	91	4.82	$266,792.78
2006	346	5.46	$1,261,588.09	93	5.92	$356,615.70
2007	412	5.5	$1,591,297.67	68	4.92	$221,183.93
2008	523	7.19	$2,794,425.83	200	14.34	$2,130,703.11

Source: MHS Mart, 18 June 2009

TriWest analysis of the average number of bed days filled by ADSM is listed below in Figure 5. The average number of beds filled per day provides a demand analysis for staffing considerations. Projected facilities renovations are staffing hires are based on the number of beds filled on a daily basis. Projected average number of beds filled for FY2009 and beyond is based on FY2008 historical data multiplied by the number of incoming Fort Carson ADMS and ADFM growth under BRAC and GTA. Numbers of force structure growth used for projections can be found in Annex C.

Figure 5: ADSM Acute & Substance Abuse Average beds per day



Source: TriWest JSOPP, 24 June 2009

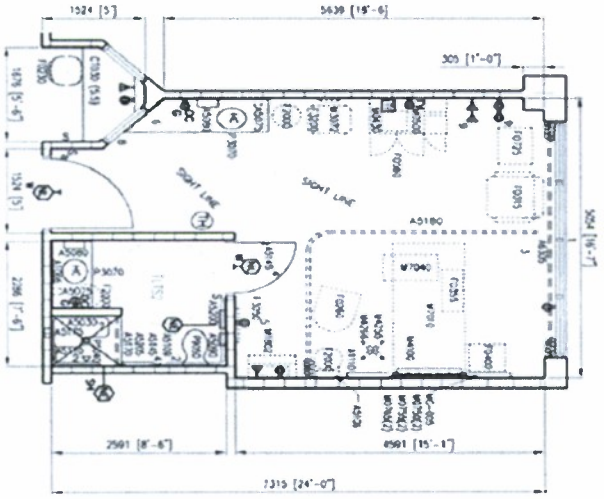
In order to implement scenario's two and three, EACH would be required to renovate existing inpatient space in compliance with DoD inpatient psychiatric standards. The DoD looks to TRICARE for space planning criteria and guide-plates for all construction and renovation. TRICARE posts specific requirements which define working environments and equipment based on specialty services. Guide-plates and space planning criteria (recommendations) were obtained from the following web site, www.tricare.mil/ocfo/ppmd/criteria.cfm. Cost estimates associated with using these facility guide-plates and planning criteria renovation was developed in coordination with the EACH Chief, Facility Management Branch, Mr. Rashad Rajab. The local office of the Health Facility Planning Agency (HFPA) provided facility renovation plans and schedules through FY12 to assist in projecting potential space for this BCA.

Space planning for inpatient psychiatric units was extracted from Chapter 4.6 of the August 2006 DoD Space Planning Criteria for Health Facilities guide found at www.tricare.mil/ocfo/ppmd/criteri.cfm. These criteria simply stated provide the recommend square footage requirements and room codes for the various types of psychiatric beds and systems. In addition to the authorized square footage this chapter recommends the appropriate number and ratio of nursing and administrative areas. Annex A details the recommended spaces and authorized net square feet (Nsf) for the various types of psychiatric rooms.

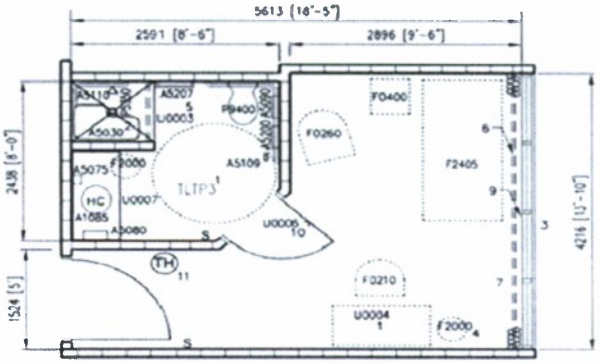
In addition to the space planning document in Annex A the HFPA uses guide-plates from the Portfolio Planning & Management Division (PPMD) to assist facility managers with construction requirements. Guide-plates for inpatient psychiatric units are available to DoD Facility Managers at www.tricare.mil/ocfo/ppmd/guideplates.cfm and an example guide-plate for a substance abuse, alcohol rehab 1 bed room is below in Figure 6 below. For inpatient psychiatric services the guide-plates typically incorporate a

floor/equipment plan, ceiling plan, elevations plan, and a list of recommended medical equipment. Figure 6 represents the floor/equipment plan for both a standard medical/surgical 1 bed room and a substance/alcohol abuse 1 bed room

Figure 6: Guide-plates for standard 1 bed Medical/Surgical and Inpatient Psychiatric room



Bedroom, Medical/Surgical 1 Bed (BRMS1) 4.01.01



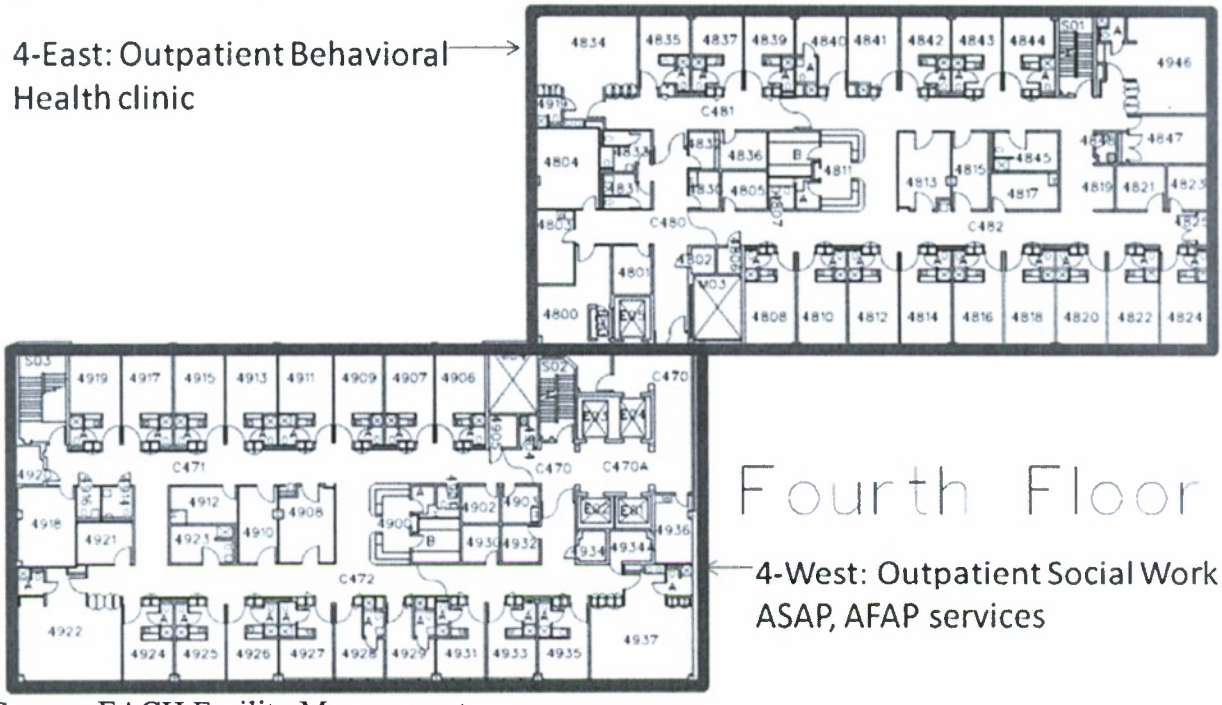
Bedroom, Substance Abuse Alcohol Rehab, 1 Bed (BRNP1) 4.01.07

Source: www.tricare.mil/ocfo/ppmd/guidplates.cfm

Renovation of existing inpatient medical surgical space is required in order to proceed under scenario 2 and 3, and the following area is used as a potential space for consideration in recapturing inpatient mental health services at EACH. Figure 7 is the EACH 4th floor West currently occupied by outpatient social work, ASAP, AFAP, and is scheduled to be vacated not later than August 2010 under the Soldier Family Care Clinic (SFCC) moving plan. Behavioral Health leadership is currently looking at the possibility of moving these services out prior to the August 2010 date based on availability of alternate facilities on main post for these services. Costs associated with renovation of this space into an inpatient psychiatric ward were calculated at $244.17 per square foot by the Chief of Facilities Management, and HFPA. The cost of $250.00 per square foot is used for this BCA analysis and is sufficient based on guidance from the Great Plains

Regional Medical Command Facilities Manager, and historical costs associated with similar projects at EACH. In the event that a total demolition and reconstruction would be required the costs would be $350.00 per square foot of renovated space.

Figure 7: Evans Army Community Hospital 4th Floor structural plan



Source: EACH Facility Management

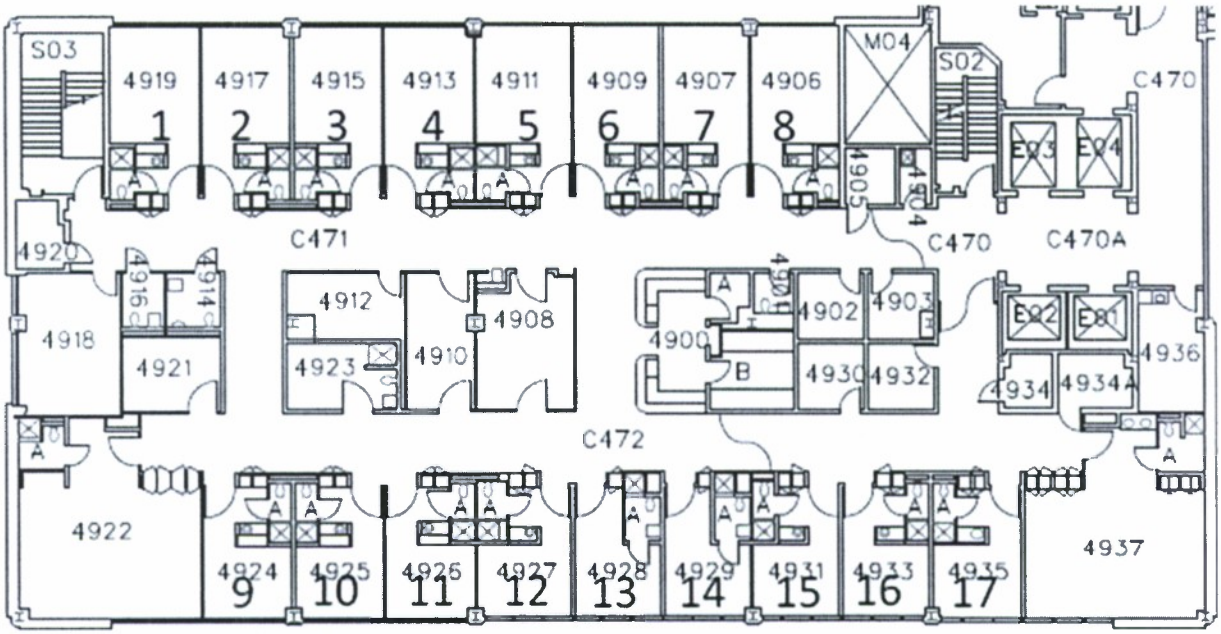
Renovation of 4-West is based on availability of the space in relation to other services moving as part of BRAC and GTA growth. Other similar spaces such as the 5th floor Medical Surgical Ward could be used to facilitate an inpatient psychiatric unit and that floor is projected to be available in the FY12 construction plan. Figure 8 is an exploded view of 4-West and details the number of rooms that could be converted to inpatient psychiatric space based on HFPA planning criteria and guide-plates. The existing treatment rooms in Figure 8 are 249.15 square feet of space plus an additional 21.46 square feet of bathroom space for a total of 270.61 Nsf.

Renovation expenses for these 17 rooms to be converted to inpatient psychiatric requirements, excluding equipment are approximately $1.15 million. To renovate the

entire floor (11,200 Nsf), including nursing and administrative space would approach $2.8 million dollars. In addition to the 17 private inpatient rooms both 4-West and the 5th floor would accommodate two larger rooms for counseling or other purposes. Supply and maintenance costs associated with inpatient psychiatry services are approximately $217.22 per bed day as calculated using EAS IV data. Marginal supply costs are calculated by taking into account the following services: linen, housekeeping, electricity, water, and other ancillary services. Operating a 17 bed inpatient unit would cost approximately $3,700 per day, or $1.35 million per year. Of note, the hospital would be required to pay this facility cost regardless of the type of inpatient service placed in this area.

Under the current BRAC and GTA plans this 4th floor space is projected for conversion to a 36 bed medical/surgical ward which would relocate from the 5th floor. Funding for renovation of this 4th floor space to accommodate a future medical/surgical space is $40 million dollars as part of the current FY12 military construction project. This BCA will list all costs associated with renovation of inpatient space, but it should be noted that these expenditures are already programmed and funded under BRAC/GTA. The EACH Commander may be able to utilize existing funding for renovation of an inpatient psychiatric ward, but this BCA will not count on this funding stream.

Figure 8: EACH, 4-West floor layout



Source: EACH Facility Management

Renovation of the 17 rooms on 4-West would yield at minimum, 17 single person psychiatric beds, but the potential exists to place more than one bed per room. 17 single bed rooms will be used for the purposes of this BCA. Should the command wish to provide a mixture of single, two-bed, and seclusion bedrooms the existing space of each exam room would be sufficient after renovation.

Staffing considerations under scenarios 2 and 3 require a substantial increase in the behavioral health department. In order to appropriately staff an inpatient psychiatric ward this BCA uses the CRDAMC Staffing Plan and Indicators, Psychiatric Nursing Unit Standard Operating Procedure (SOP) dated 16 July 2008. This SOP bases psychiatric nursing staffing requirements on: Joint Commission manual version 2006, Standards of clinical Nursing Practice from the American Nurses Association (ANA), 1998, and Field Manual (FM) 8-501, the workload management system for nursing (WMSN). Staffing for an inpatient psychiatric unit is a 24/7 mission and is based on the intensity/acuity of the patients admitted to the ward. Of note, the CRDAMC inpatient psychiatric unit was comprised of 12 beds at the time of this SOP.

Under the Ft. Hood model the patients are categorized into 6 distinct acuity levels. Category 6 patients are those placed in restraints and require 1:1 monitoring at all times. Category 5 patients are those patients on line of sight (LOS) requiring 1:1 monitoring at all times. Category 4 patients are those patients restricted to the inpatient unit who require a physical or LOS checks every 15 minutes. Category 3 patients are those patients on a buddy or ward status that requires a physical or LOS check every 30 minutes. These patient acuity levels are used to determine the appropriate nursing staff ratios. Table 7 is the CRDAMC patient acuity guide based on percentage of patient numbers on the ward. A potential issue with utilization is that the number of patients in each category will not always fit into the average percentage of patients on the ward.

Table 7. Patient acuity used by CRDAMC inpatient psychiatry to establish nursing staff

Category Level	*Description*	*Average % on ward*
6	Patients in restraints and on Line of Sight who require 1:1 coverage on all shifts	0.5%
5	Patients on Line of Sight who require 1:1 coverage on all shifts	0.5%
4	Patients on Restrict to Unit Status, who require 15 min. checks to ensure safety	30%
3	Patients on Ward or Buddy status who require 30 min. checks	69%

Source: CRDAMC Behavioral Health Division Standard Operating Procedures. Data supported by the Workload Management System for Nursing (WMSN).

CRDAMC staffing for their 12 bed inpatient psychiatric unit served as a model for table 10 which is an approximate skill mix requirement based on a 17 bed psychiatric nursing unit (PNU). Table 8 details the nursing skill mix required to operate a 24x7 unit, with break outs by day, evening, and night shift work. Provider's schedules mirror those utilized by CRDAMC and conform to industry requirements and Automated Staffing Assessment Models (ASAM). On call rosters are utilized to adjust to peaks in demand and all providers and nursing staff would be required to participate in on-call duties. For

immediate needs to increase nursing staff an alternate internal shifting of nursing personnel from other areas of the hospital would be required. This internal shifting must be coordinated and last only long enough for the on-call staff to arrive at the facility in accordance with the on-call procedures. Individual salary ranges for positions was obtained from www.cpol.army.mil on 1 July 2009. Staff mix for the potential 17 bed unit was reviewed and approved by Dr. Anne League, EACH staff psychiatrist and former director of inpatient mental health services. In order to obtain a close approximation to true salary costs the median value was utilized for: Psychiatric Nurses, LPN, Psychology Technician, Psychiatric Nursing Assistant, and Medical Support Technicians. The maximum salary plus 28% benefit package and specialty pay bonus were utilized in calculating the costs to hire a Psychiatrist in Colorado Springs. Military salary levels represented in table 8 are likely to be lower than salaries within the civilian marketplace for the same specialty. For example, according to www.salary.com a psychiatrist in Colorado Springs could potential cost up to $238,726 with bonuses, healthcare, and other benefits (Table 9). Total cost for salaries is derived from the Medical Command (MEDCOM) BCA Tool-Kit based on GS grade position, type of staff member, and locality pay unique to Colorado Springs, Colorado.

Table 8: Staffing required/recommended for a 17 bed inpatient mental health unit

17 bed staffing	Required/Recommended	Individual Cost range	Total Cost
Psychiatrist	3 (GS-15/Y2)	101K-197,338	$578,637.00
Psych Nurse Supervisor	1 (GS-11)	51K-75,396.00	$75,663.00
RN(clinical/psychiatric)	12 (GS-10)	51K-66,747.00	$826,428.00
LPN	3 (GS-05)	30K-40,005.00	$123,825.00
Psych Technician	8 (GS-09)	47K-61,956	$500,264.00
PNA	8 (GS-05)	30K-40,005.00	$330,200.00
Medical Support Tech	2 (YB-01)	21K-42,142.00	$53,558.00
Total	37	Took-kit salary	**$2,488,575.00**

Source: Salary costs obtained from www.cpol.army.mil

Table 9: Salary listing for Psychiatrist

Psychiatrist - Colorado Springs, CO 80913

Benefit	Median Amount	% of Total
Base Salary	$175,058	73.3%
Bonuses	$7,911	3.3%
Social Security	$9,275	3.9%
401k / 403b	$6,587	2.8%
Disability	$1,830	0.8%
Healthcare	$5,722	2.4%
Pension	$8,417	3.5%
Time Off	$23,927	10.0%
Total	**$238,726**	**100%**

Source: www.salary.com (July 8, 2009)

Table 10: Weekday staffing required/recommended for inpatient mental health

Weekday	Physician	Nursing	LPN	PNA	Total
Days (0645-1515)	2.0	3.0	2.0	4.0	11
Evenings (1445-2315)	1.0	2.0	1.0	3.0	7
Nights (2300-0700)	On Call	1.5	0	3.0	4.5

Table 11: Weekend/Holiday staffing required/recommended for inpatient mental health

Weekends / Holidays	Physician	Nursing	LPN	PNA	Total
Days (0645-1515)	On Call	2.0	1.5	3.0	6.5
Evenings (1445-2315)	On Call	2.0	0	3.0	5.0
Nights (2300-0700)	On Call	1.5	0	3.0	4.5

Staffing models used for this inpatient mental health unit consist solely of government service (GS) employees. The purpose of the use of GS employees is to obtain costs for the most stable employee population. Substitution of military personnel or contract civilians will cause a shift in the proposed personnel costs in Table 8. Military personnel would bring the costs down significantly where contract civilians may or may not be more expensive based on market demands. The desired model for this

BCA is to maximize the use of GS personnel to avoid issues regarding availability of military personnel due to training, and deployment requirements. Recommended staffing mix from tables 10, and 11 should provide flexibility for shift activities, patient transfers, and temporary shifts in patient acuity levels. The hospital would be required to have contingency plans in place to augment nursing personnel on the inpatient mental health unit should the psychiatric nurse supervisor require additional PNU staff.

Table 12 below provides a summary of the amount of inpatient mental health services for Active Duty Service Members as well as associated costs to recapture these services within the Hospital. In FY 2009 the construction costs represent the median value of the estimates provided by HFPA and the local Facility Management. Construction is estimated to take between 6 to 8 months and therefore the amount of recaptured workload as well as yearly supply costs is approximately 40% of the maximum values. Under scenario 2 a return on investment (ROI) of $2.79 million dollars may be attained by the end of the 2011 Fiscal Year. This figure is based on projected workload for active duty using the 2008 baseline figures and requires a 100% recapture of ADSM workload. Annex J provides more detailed return on investment figures based on workload recapture estimates ranging from 50% to 100%. Workload recapture would only be successful with implementation of the right of first refusal (ROFR) for all ADSM workload within the marketplace. The ROFR process is not unique and could be implemented immediately by the TriWest agent, but execution of this process would take significant coordination with the local civilian market and the Colorado Springs Healthcare Board of Governors (BOG). Data supports a positive ROI even at a 60% recapture level from FY 2011 forward based on a phased implementation of this recapture should the need arise.

Table 12: Summary of Costs and Return on Investment in millions

FY	Troops	Paid	Sum of Bed Days	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net
2008	19000	4.9	6630	0	0	0	4.9	0	0
2009	19973	5.17	6970	0	0	0	5.17	0	0
2010	25203	6.53	8795	2.488	1.98	444K	4.912	2.61	-2.3
2011	25597	6.63	8932	2.488	0	1.35m	3.838	6.635	2.79
2012	25864	6.70	9025	2.488	0	1.35m	3.838	6.700	2.86
2013	26129	6.77	9118	2.488	0	1.35m	3.838	6.770	2.93
2014	26129	6.77	9118	2.488	0	1.35m	3.838	6.770	2.93

C.3.c Scenario 3 Data

In order to proceed with scenario 3 this BCA must establish what the existing workload for all TRICARE Prime enrollees is currently being purchased within the Colorado Springs metropolitan area. Services purchased are broken down into the same three main categories used for scenario 2: Acute Behavioral Health (ABH), Residential Treatment Center (RTC), and Substance Abuse (SA). To more clearly understand the clinical diagnosis resulting in admission this scenario will also utilize Annex B provided by TriWest. This scenario will focus on the same recapture as scenario 2: Acute and Substance abuse admissions.

Data collection for purchased care workload was part of the June 18, 2009 M2 extraction. Annex D is the screen capture from M2 displaying the exact code sets used. Annex B contains the full range of diagnostic codes used by TriWest in pulling data for market analysis under the JSOPP. This scenario also will utilize both M2 and TriWest data in determining the amount of workload purchased from the major network providers in the Colorado Springs market (Table 2). Table 13 contains an abbreviated listing of the number of inpatient admissions, sum of bed days, ALOS and amount paid per claim for all TRICARE Prime enrollees receiving inpatient mental health treatment.

Table 13: TRICARE Prime Inpatient (Alcohol/Drug Induced Organic Mental Disorders and Mental Disease and Disorders combined (MCD 19&20)

Year	Admissions	Sum of Bed Days	ALOS	Amt. Paid
2003	833	5,424	6.27	$2,335,508.37
2004	961	6,459	6.57	$2,846,172.74
2005	1,315	8,525	6.29	$4,252,514.02
2006	1,211	8,935	7.31	$4,796,238.34
2007	1,238	10,030	8.09	$5,378,785.99
2008	1,634	17,151	10.48	$10,711,317.05

Source: MHS Mart, 18 June 2009

Table 14 contains a list of services broken down by either Mental Disease & Disorders (MDC 19) or Alcohol/Drug Use & Alcohol/Drug Induced Organic Mental Disorders (MDC 20). Breaking it down further by these two categories provides a more detailed look at the type and amounts paid out per diagnostic range.

Table 14: TRICARE Prime Inpatient (Alcohol/Drug Induced Organic Mental Disorders and Mental Disease and Disorders separated (MCD 19&20)

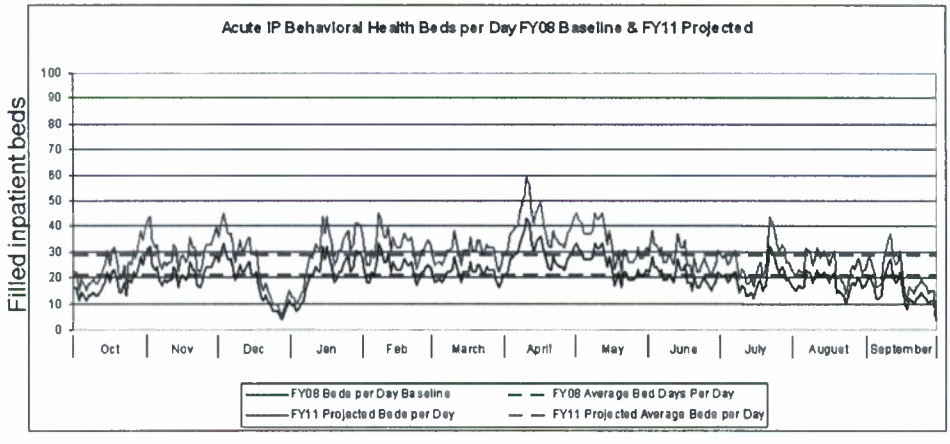
Year	MDC 19 Admission	ALOS	Amt. Paid	MDC 20 Admission	ALOS	Amt. Paid
2003	684	6.29	$1,906,086.09	149	6.16	$429,422,.28
2004	772	6.46	$2,261,973.02	189	7.04	$584,199.72
2005	1105	6.36	$3,609,660.08	210	5.96	$642,853.94
2006	986	7.48	$3,842,004.31	225	6..60	$954,234.03
2007	1006	8.28	$4,447,164.84	232	7.28	$931,621.15
2008	1239	9.86	$7,320,155.80	395	12.44	$3,391,161.25

Source: MHS Mart, 18 June 2009

TriWest analysis of the average number of bed days filled by TRICARE Prime enrollees is listed below in Figure 9. The average number of beds filled per day provides a demand analysis for staffing considerations. Projected facilities renovations and staffing requirements are based on the number of beds filled on a daily basis. Projected average number of beds filled for FY2009 and beyond is based on FY2008 historical data multiplied by the ratio calculated from the baseline population to the number of incoming Fort Carson ADMS and ADFM growth under BRAC and GTA. Figure 9 demonstrates

that approximately 20 patients per day required inpatient mental health treatment for acute behavioral health. Figure 9 excludes substance abuse and residential treatment center numbers. Figure 10 provides the average number of bed days for substance abuse at an average of 17 beds per day. Combined, the number of beds filled for both acute and substance abuse reach nearly 40 beds per day. In order to accommodate all TRICARE Prime enrollees the Hospital would be required to convert an additional ward such as 4-East. Conversion of this additional ward would add 17 beds for a total of 34 total inpatient mental health beds. This scenario would double both the projected facility renovation and personnel costs under scenario 2 above as seen in Table 15 and 16.

Figure 9: Average Acute beds per Day FY08 and FY11 projected

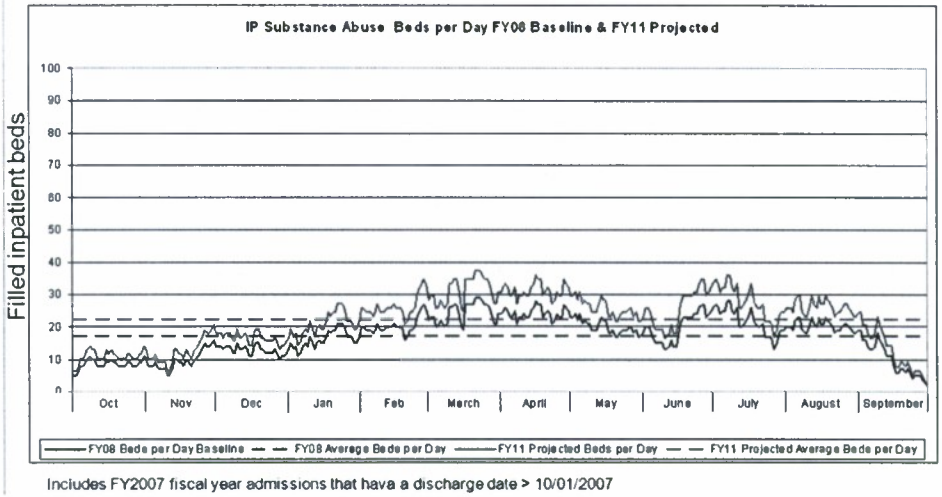


Acute IP Behavioral Health Excludes Substance Abuse and RTC

Data Includes FY2007 fiscal year admissions that have a discharge date > 10/01/2007

Source: TriWest JSOPP, 24 June 2009

Figure 10: Average SA beds per Day FY08 and FY11 projected



Source: TriWest JSOPP, 24 June 2009

Table 15: Staffing required/recommended for a 34 bed inpatient mental health unit

34 bed staffing	Required/Recommended	Individual Cost	Total Cost
Psychiatrist	6 (GS-15/Y2)	197,338.00	$1,157,274.00
Psych Nurse Supv.	2 (GS-11)	51K-75,396.00	$151,326.00
RN(clinical/psychiatric)	24 (GS-10)	51K-66,747.00	$1,652,856.00
LPN	6 (GS-05)	30K-40,005.00	$247,650.00
Psych Technician	16 (GS-09)	47K-61,956	$1,000,528.00
PNA	16 (GS-05)	30K-40,005.00	$660,400.00
Medical Support Tech	4 (YB-01)	21K-42,142.00	$107,116.00
Total	74	Median salary	**$4,977,150.00**

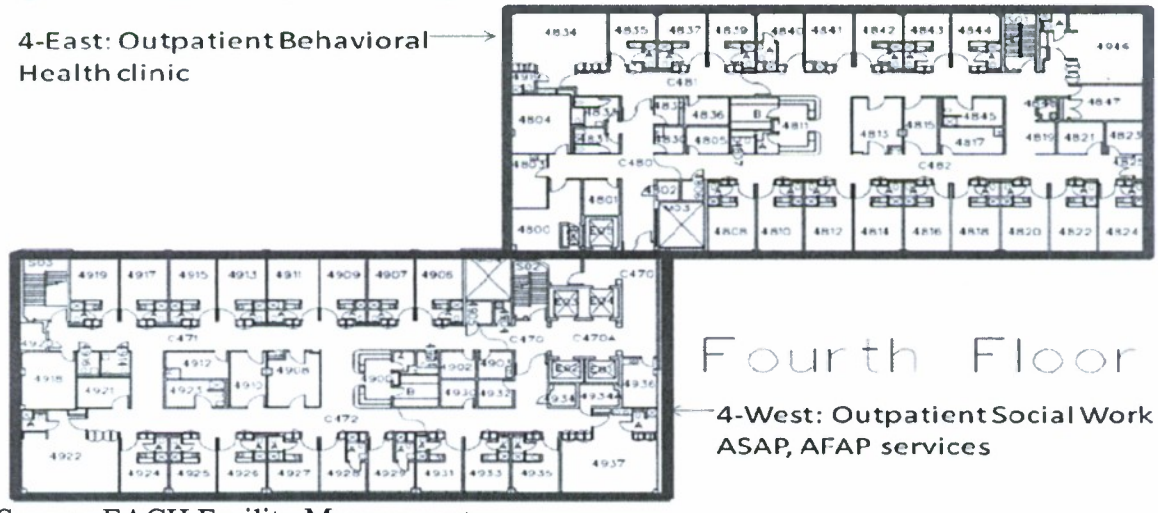
Source: Salary costs obtained from www.cpol.army.mil

Renovation of the entire 4th floor is required to provide sufficient inpatient beds to recapture all TRICARE Prime inpatient workload. In order to accommodate this renovation the existing Behavioral Health services on 4-East would be required to move to another location. The existing treatment rooms in Figure 9 are 249.15 square feet of space plus an additional 21.46 square feet of bathroom space for a total of 270.61 Nsf. Renovation expenses to convert 34 rooms to meet inpatient psychiatric requirements, excluding equipment are approximately $2.30 million. To renovate the entire floor (22,400 Nsf), including nursing and administrative space would approach $5.6 million. In

addition to the 34 private inpatient rooms both 4-West and 4-East would accommodate two larger rooms on each wing for counseling or other purposes. Supply and maintenance costs associated with inpatient psychiatry services are approximately $217.22 per bed day as calculated using EAS IV data. Marginal supply costs are calculated by taking into account the following services: linen, housekeeping, electricity, water, and other ancillary services. Operating a 34 bed inpatient unit would cost approximately $7,400 per day, or $2.7 million per year. Of note, is the fact that the above mentioned facility costs associated with using the inpatient space is the same, regardless of the type of inpatient housed in the area.

As discussed in scenario 2 the 4th floor space is projected for conversion to a 36 bed medical/surgical ward which would relocate from the 5th floor. Money for renovation of this 4th floor space to accommodate a future medical/surgical space is $40 million for the entire FY12 project. This BCA will list all costs associated with renovation of inpatient space, but it should be noted that these expenditures are already programmed and set to be funded under BRAC/GTA.

Figure 10: Evans Army Community Hospital 4th Floor structural plan



Source: EACH Facility Management

Renovation of the entire 4th floor is required to provide sufficient inpatient bed space to recapture all TRICARE Prime inpatient workload. In order to accommodate this renovation the existing Behavioral Health services on 4-East would be required to move to another location. The existing treatment rooms in Figure 8 are 249.15 square feet of space plus an additional 21.46 square feet of bathroom space for a total of 270.61 Nsf.

Renovation expenses for these 34 rooms to be converted to inpatient psychiatric requirements, excluding equipment are approximately $2.30 million. To renovate the entire floor (22,400 Nsf), including nursing and administrative space would approach $5.6 million dollars. In addition to the 34 private inpatient rooms both 4-West and 4-East would accommodate two larger rooms on each wing for counseling or other purposes. Supply and maintenance costs associated with inpatient psychiatry services are approximately $217.22 per bed day as calculated using EAS IV data. Marginal supply costs are calculated by taking into account the following services: linen, housekeeping, electricity, water, and other ancillary services. Operating a 34 bed inpatient unit would cost approximately $7,400 per day.

Table 16 below provides a summary of the amount of inpatient mental health services for Active Duty Service Members as well as associated costs to recapture these services within the Hospital. In FY 2009 the construction costs represent the median value of the estimates provided by HFPA and the local Facility Management. Construction is estimated to take between 6 to 8 months and therefore the amount of recaptured workload as well as yearly supply costs is approximately 40% of the maximum values. Under scenario 3 a return on investment (ROI) of $6.76 million dollars may be realized by the end of the 2011 Fiscal Year. This figure is based on projected workload for active duty using the 2008 baseline figures and requires a 100% recapture of workload. Annex J provides more detailed return on investment figures based on

workload recapture estimates ranging from 50% to 100%. Workload recapture would only be successful with implementation of the right of first refusal (ROFR) for all workload within the marketplace. The ROFR process is not unique and could be implemented immediately by the TriWest agent, but execution of this would take significant coordination with the local civilian market and the Colorado Springs Healthcare Board of Governors (BOG). Data supports a positive ROI even at a 60% recapture level from FY 2011 forward based on a phased implementation of this recapture should the need arise.

Table 16: Summary of Costs and Return on Investment (in millions)

FY	Troops	Paid	Sum of Bed Days	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net
2008	19000	10.71	17151	0	0	0	10.71	0	0
2009	19973	11.25	18029	0	0	0	11.25	0	0
2010	25203	14.20	22750	4.97	3.96	888K	9.818	7.100	-2.7
2011	25597	14.43	23106	4.97	0	2.70m	7.670	14.43	6.76
2012	25864	14.58	23347	4.97	0	2.70m	7.670	14.58	6.91
2013	26129	14.73	23586	4.97	0	2.70m	7.670	14.73	7.06
2014	26129	14.73	23586	4.97	0	2.70m	7.670	14.73	7.06

C.4. Financial Metrics

The financial metrics used in the analysis include annual and cumulative cash flows, simple return on investment (ROI), payback period, and the internal rate of return (IRR). Incremental values were used to develop cash flow estimates for the five-year period starting 01 October 2010. Year zero will include the renovation costs, initial hire and training of all staff associated with creation of the inpatient beds in the Evans facility prior to the start date. This analysis applies a discount rate of 2.30% as suggested by the Office of Management and Budget (OMB).

C.5. Benefits

C.5.a Scenario 1 Benefits

Under scenario 1 the primary benefit is that the hospital does not have to expend any additional resources within the facility to provide inpatient mental health services. The civilian network has expressed through the TRICARE contractor a willingness to expand services to meet projected demands under BRAC and GTA. Scenario 1 would allow the command to focus personnel, construction, and financial efforts in other areas within the MTF.

C.5.b Scenario 2 Benefits

Scenario 2 proposes recapture of inpatient mental health services for Active Duty Service Members (ADSM) and is the most likely course of action between scenarios 2 and 3. With the implementation of scenario 2 the Hospital would dramatically improve the amount of inpatient psychiatric services available to ADSM. The current practice of sending all patients with inpatient psychiatric needs to local civilian institutions does not provide for the best possible treatment outcomes. Continuity of care and measurable treatment outcomes are of significant concern to the Evans Behavioral Health staff. The ability to provide inpatient service within EACH would greatly enhance the staff members' ability to ensure seamless continuity of care and timely patient discharge. The command would also be demonstrating a commitment to inpatient mental health services for ADSM's and reassure the public that it is doing everything possible to ensure that the ADSM's mental health needs are being met.

C.5.c Scenario 3 Benefits

With the implementation of scenario 3 the Hospital would also dramatically improve the amount of inpatient psychiatric services available to ADSM and TRICARE Prime enrollees. As mentioned previously the current practice of sending all patients

with inpatient psychiatric needs to local civilian institutions does not provide for the best possible treatment outcomes. Continuity of care and measurable treatment outcomes remain a significant concern to the Evans Behavioral Health staff. The ability to provide inpatient service within EACH would greatly enhance the staff members' ability to ensure seamless continuity of care and timely patient discharge.

C.6. Costs

Direct costs associated with recapture of inpatient psychiatric services are in the areas of new staffing hires, facility renovation, and daily supply costs. In addition to the direct costs of hiring new staff and preparing the facility the hospital command would be required to make a deliberate shift in BRAC and GTA plans for the hospital's future growth. For example, if the commander decided to implement either scenario 2 or 3 then another service line would have to forego expansion into the 4th floor under proposed BRAC/GTA. Marginal supply costs for the proposed inpatient psychiatric ward would not be more than the proposed medical/surgical ward for the 4th floor and this amount could be discounted from Tables 12 and 16. EACH would incur additional ancillary service costs such as inpatient meals, security, medication, and others as part of this increased inpatient workload. These ancillary costs were not assessed as part of this BCA.

C.6.a Scenario 1 Costs

Likely costs associated with scenario 1 are demonstrated in Table 17 below.

Table 17: Summary of Costs and Return on Investment (in millions)

FY	Purchased Care	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net
2008	10.71	0	0	0	10.71	0	-10.71
2009	11.25	0	0	0	11.25	0	-11.25
2010	14.20	0	0	0	9.818	0	-14.20
2011	14.43	0	0	0	7.670	0	-14.43
2012	14.58	0	0	0	7.670	0	-14.58
2013	14.73	0	0	0	7.670	0	-14.73
2014	14.73	0	0	0	7.670	0	-14.73

C.6.b Scenario 2 Costs

Likely costs associated with scenario 2 are demonstrated in Table 18 below.

Table 18: Summary of Costs and Return on Investment (in millions)

FY	Purchased Care	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net
2008	4.90	0	0	0	4.90	0	-4.90
2009	5.17	0	0	0	5.17	0	-5.17
2010	6.53	2.488	1.98	444k	4.912	2.61	-2.30
2011	6.63	2.488	0	1.35	3.838	6.635	2.79
2012	6.70	2.488	0	1.35	3.838	6.700	2.86
2013	6.77	2.488	0	1.35	3.838	6.770	2.93
2014	6.77	2.488	0	1.35	3.838	6.770	2.93

C.6.c Scenario 3 Costs

Likely costs associated with scenario 3 are demonstrated in Table 19 below.

Table 19: Summary of Costs and Return on Investment (in millions)

FY	Purchased Care	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net
2008	10.71	0	0	0	10.71	0	-10.71
2009	11.25	0	0	0	11.25	0	-11.25
2010	14.20	0	0	0	9.818	0	-14.20
2011	14.43	0	0	0	7.670	0	-14.43
2012	14.58	0	0	0	7.670	0	-14.58
2013	14.73	0	0	0	7.670	0	-14.73
2014	14.73	0	0	0	7.670	0	-14.73

C.7. Assumptions

Major assumptions for all scenarios within this Business Case Analysis will consist of the following:

a. JSOPP and M2 data is accurate

b. EACH would be able to obtain community support considering the amount of services that the network has provided over the past 8 years for this patient population.

C.7.a Scenario 1 specific assumptions

a. EACH would be allowed by Western Regional Medical Command (WRMC) to continue sending ADSM and Family Members to the economy for inpatient mental health services.

C.7.a Scenario 2 specific assumptions

a. EACH would be able to obtain start-up funding for the first 2 years from MEDCOM

b. EACH would be able to relocate necessary staff services to accommodate inpatient behavioral health.

c. EACH would be able to hire appropriate civilian staffing within proposed salary limits or be capable of offering sufficient salaries as to attract sufficient candidates.

d. EACH would be able to obtain reimbursement under PBAM commensurate with purchased care levels in order to meet projected costs.

e. EACH would be able to implement ROFR for all ADSM enrolled within the catchment area.

f. EACH would be able to renovate existing space within proposed costs.

C.7.a Scenario 3 specific assumptions

a. EACH would be able to obtain start-up funding for the first 2 years from MEDCOM

b. EACH would be able to relocate necessary staff services.

c. EACH would be able to hire appropriate civilian staffing within proposed salary limits or be capable of offering sufficient salaries as to attract sufficient candidates.

d. EACH would be able to obtain reimbursement under PBAM commensurate with purchased care levels in order to meet projected costs.

e. EACH would be able to implement ROFR for all TRICARE Prime enrolled beneficiaries within the catchment area.

f. EACH would be able to renovate existing space within proposed costs.

D. Business Impacts

The impact of implementation of either scenario 2 or scenario 3 would result in a significant ROI after the first full year. The ability to recapture this workload with a positive ROI and simultaneously provide a more comprehensive management of the entire healthcare spectrum makes this a very lucrative proposal. A deleterious financial impact to would occur for TriWest civilian network partners should the hospital decide to implement either scenario. However, scenario 2 would be less significant of an impact

on the community as EACH would continue to defer all non-ADSM to community resources.

D.1. Overall Results

Recapture of inpatient psychiatric services at Evans Army Community Hospital under scenario 2 results in a net cash flow of $12 million dollars over the five year analysis period with a discounted cash flow of $10.97 million using the Office of Management and Budget (OMB) discount rate of 2.3%. With a ROI of 173% for scenario 2 and an ROI of 161% for scenario 3 this BCA expects the decision to implement to rest on non-financial considerations such as space planning. The high ROI under either plan does not automatically indicate support from the command as other clinic expansion under BRAC/GTA may have a higher priority. Nonetheless, start-up costs are easily overcome under either model, and make it more likely that at least one of the two recapture scenarios are looked at further. In projecting cumulative cash flows over the five year analysis either scenario is cost effective and represents similar variables.

E. Sensitivities, Risks, and Contingencies

E.1. Sensitivities

The major factors affecting net present value are: number of inpatient bed days, personnel costs, and marginal supply costs. Tables 12 and 16 summarize the projected number of bed days, personnel costs, and facility costs for each scenario. Hospital leadership can have an impact on the marginal supply costs as well as personnel costs to a degree, but the number of patients requiring inpatient mental health services is not a factor that can be dramatically affected by leadership. A positive ROI is expected after

the first two years when construction and start-up are completed, as long as the percentage of recaptured work-load exceeds 60% of projected.

E.2. Risks

There are many risks inherent with a recapture initiative of this size. Actual patient demand, money and time resources are the most significant risk factors. This project seeks to recapture a highly specialized service to provide world-class healthcare for a highly politicized service. Mental health treatment for Soldiers and Family Members is one of the most politically sensitive topics faced by the Army Medical Department (AMEDD). Recapture of these services may be the right moral decision for military leadership, but displacing other services to make space for a mental health ward may not be the best financial decision in the 5-10 years after implementation. Recapture of these services from the civilian marketplace also runs the risk of offending network partners that provide a pivotal overflow service to DoD beneficiaries. In the event that this recapture initiative causes civilian institutions to go out of business the DoD will lose trust with market partnerships that have taken years to build. Funding of personnel and renovation costs by higher headquarters is essential to successfully implementation of either scenario two or three. Based on the political environment and projected ROI for either recapture scenario it is highly possible that funding would be provided for first year costs and that the project would have to be self-sustaining after the first year.

E.3. Contingencies

In order to implement a recapture scenario for inpatient mental health services the leadership would be required to make significant decisions within the next several months. Hospital leadership must strongly market the concept of providing inpatient mental health services with community healthcare leaders as well as solicit funding from higher headquarters. In order to mitigate the uncertainty of percentage of recapture the

command could aggressively work with major network partnerships in implementation of the ROFR process. Inability to successfully obtain civilian emergency room referrals for inpatient mental health treatment would adversely affect the ROI projected. In addition to an aggressive ROFR process the case managers and patient administration division must aggressively manage the absent sick rosters. Patient transfer protocols must be in place and effective once a beneficiary is identified as an inpatient on a civilian service.

Conclusions and Recommendations

Evans Army Community Hospital is currently hemorrhaging money for inpatient mental health services within the Colorado Springs marketplace. Considering the amount of money paid out for these services and the analysis provided in this BCA the hospital should consider implementation of a recapture initiative. A positive return on investment is possible with either scenario two or three, and it is recommended that the hospital look at implementation of scenario two. Scenario two provides for recapture of ADSM which is currently the OTSG/MEDCOM priority group for mental health services provided in the MTF. In addition to recapture of ADSM under scenario two, the civilian network can be assuaged by the fact that Family Members, Retirees, and others will continue to be referred to their facilities for treatment.

Implementation of scenario two would have less of an impact on the limited facility space and hypothetically be ready to receive patients on or about March of 2011 under current renovation and movement plans. More expedient processing is possible in the event that the commander is able to move out the current occupants of 4-West or similar sized space prior to the August 2010 occupancy dates of the SFCC. For example, should 4-West be vacated by October 2009 then the first patient could be admitted on or about the summer of 2010.

Non-financial benefits of recapturing ADSM inpatient psychiatric services are also a positive factor in considering implementation of scenario two. As previously discussed, continuity of care is a very significant issue when dealing with return to fitness for duty. Service members can be followed closely from inpatient to outpatient status by the same behavioral health team, and be afforded a military environment in which to recover and rehabilitate. Treatment and rehabilitation efforts are significantly more successful when Soldiers can identify with other patients in the therapy. Assignment of patient mentor's for amputee and burn patients within the DoD is a great example of the success of having Soldiers helping Soldiers. Providing care for service-members within the MTF has both a positive ROI in financial terms, but also in staff resiliency and return to duty rates.

Demand for inpatient psychiatric services is on the rise for both ADSM and ADFM and now is a good time to consider recapturing this service line within the MTF. This BCA considered recapture of inpatient psychiatric services without the assistance or funding from U.S. Air Force (USAF) or the VA Eastern Colorado Healthcare System (VAECHCS). EACH leadership could consider a VA Sharing agreement in order expand upon scenario three, but that would require a larger facility, or separate one, than is currently available within the EACH facility. This analysis can be utilized as a starting point for discussions between the EACH Behavioral Health leadership and the Commander to pursue possible recapture of services. Financial benefits of pursuing a recapture initiative are potentially very favorable, but continuity of care, access to care, and positive outcomes are the true goal of this initiative for the physician and patient.

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www.cpol.army.mil

H. Annex

H.1. Annex A

DoD Space Planning Criteria for Health Facilities
Psychiatric Units

FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED Nsf	PLANNING RANGE/COMMENTS
INPATIENT BEDROOMS				
Psych, Bedroom 1 Bed	BRNP1	17.19	185	
Psych Bedroom 2 Bed	BRNP2	26.01	280	
Psych Seclusion Bedroom	BRNP5	13.01	140	
Psych Seclusion, Anteroom	BRNP6	5.57	60	
Toilet – Psychiatric	TLTP1	5.57	60	
Toilet/Shower - Psychiatric	TLTP3	5.57	60	One per inpatient bed
NURSING/ADMINISTRATIVE AREAS (PER NURSING UNIT)				
Nurse Station	NSTA1	13.94	150	Minimum, for the first 6 beds. Add 5 Nsf for each bed over 6. One per unit
Central Monitor Server	CMP02	5.57	60	May be provided if central monitoring is required for telemetry, patient monitors, etc.
Treatment room (GP)	TRGM1	16.26	175	One per unit. For minor procedures.
Medication Preparation	MEDP1	9.29	100	One per unit
Nourishment Center (GP)	NCWD1	9.29	100	One per unit
Nurse Workroom	WRCH1	11.15	120	One per unit
Conference / Report Room	CRA01	18.58	200	One per unit
Physicians' Charting / Dictation	WRCH1	7.43	80	One per unit
On-Call Room (GP)	DUTY1	11.15	120	If required
On Call Toilet & Shower	TLTS1	5.57	60	One per On-Call room
Kitchen	OTDL1	11.15	120	One per unit
Group Activity Room	DAYR1	23.23	250	Min. One per unit an 10Nsf for each bed over 10
Group Therapy	OPMH1	23.23	250	Min. One per unit an 10Nsf for each bed over 10
Nurse Supervisor's Office,	OFA01	11.15	120	Private office, standard furniture: One per unit
	OFA02	11.15	120	Private office, system furniture
NCOIC/LCPO/LPO Office	OFA01/2	11.15	120	One per unit
Private Office	OFA01/2	11.15	120	For authorized FTE
Administrative work area	OFA03	5.57	60	Cubicles for authorized FTE

SUPPORT AREAS (PER NURSING UNIT)				
Staff Lounge	SL001	13.01	140	One per unit
Staff Toilets			varies	See Chapter 6.1 (Common Areas).
Staff Locker	LR001		varies	See Chapter 6.1 (Common Areas).
Clean Supply	UCCL1	11.15	120	Minimum, for the first 12 beds. Add 5 Nsf per bed over 12.
Soiled Utility	USCL1	9.29	100	One per unit
Clean Linen	UCCL1	5.57	60	One per unit
Equipment Storage	SRSE1	9.29	100	One per unit
Patient property storage	SRPB1	3.72	40	One per unit
Crash cart storage	RCA01	3.72	40	One per unit
Stretcher and Wheelchair Storage	SRLW1	7.43	80	One per unit

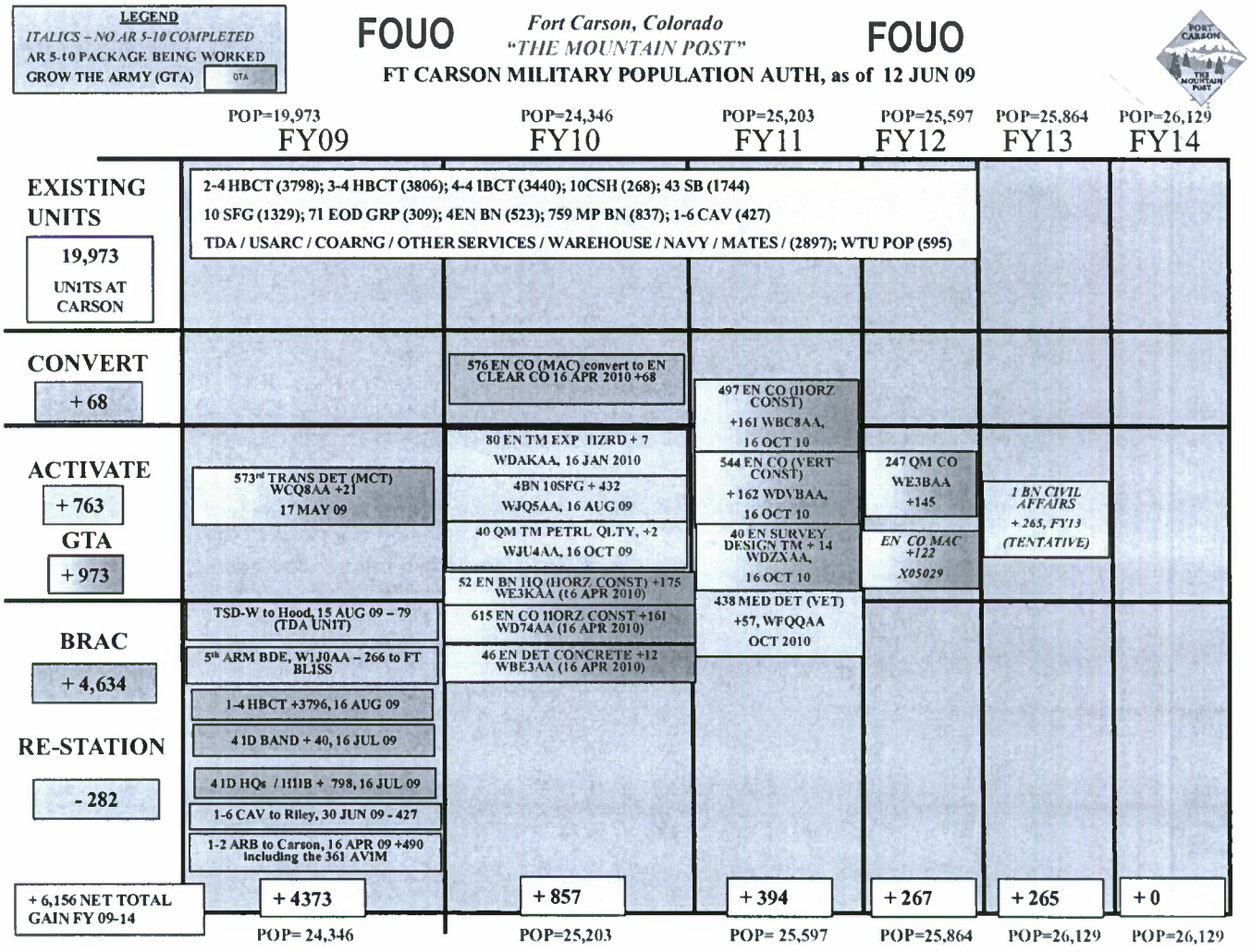
H.2. Annex B. Admission Diagnosis Codes and categories

Acute Behavioral Health Admit Diag Codes				Substance Abuse Admit Diag Codes	
Admit_Diag_Cd	Diag_Desc	Admit_Diag_Cd	Diag_Desc	Admit_Diag_Cd	Diag_Desc
29530	PARANOID SCHIZO-UNSPEC	30002	GENERALIZED ANXIETY DIS	2910	DELIRIUM TREMENS
29532	PARANOID SCHIZO-CHRONIC	3003	OBSESSIVE-COMPULSIVE DIS	29181	ALCOHOL WITHDRAWAL
29570	SCHIZOAFFECTIVE DIS NOS	3004	DYSTHYMIC DISORDER	2920	DRUG WITHDRAWAL
29590	SCHIZOPHRENIA NOS-UNSPEC	3007	HYPOCHONDRIASIS	29212	DRUG PSY DIS W HALLUCIN
29592	SCHIZOPHRENIA NOS-CHR	30113	CYCLOTHYMIC DISORDER	29281	DRUG-INDUCED DELIRIUM
29620	DEPRESS PSYCHOSIS-UNSPEC	3071	ANOREXIA NERVOSA	29289	DRUG MENTAL DISORDER NEC
29622	DEPRESSIVE PSYCHOSIS-MOD	30747	SLEEP STAGE DYSFUNC NEC	30300	AC ALCOHOL INTOX-UNSPEC
29623	DEPRESS PSYCHOSIS-SEVERE	3080	STRESS REACT, EMOTIONAL	30301	AC ALCOHOL INTOX-CONTIN
29630	RECURR DEPR PSYCHOS-UNSP	3089	ACUTE STRESS REACT NOS	30390	ALCOH DEP NEC/NOS-UNSPEC
29632	RECURR DEPR PSYCHOS-MOD	3090	ADJUSTMNT DIS W DEPRESSN	30391	ALCOH DEP NEC/NOS-CONTIN
29633	RECUR DEPR PSYCH-SEVERE	30921	SEPARATION ANXIETY	30400	OPIOID DEPENDENCE-UNSPEC
29634	REC DEPR PSYCH-PSYCHOTIC	30924	ADJUSTMENT DIS W ANXIETY	30401	OPIOID DEPENDENCE-CONTIN
29640	BIPOL I CURRNT MANIC NOS	30928	ADJUST DIS W ANXIETY/DEP	30410	SED,HYP,ANXIOLYT DEP-NOS
29643	BIPOL I MANC-SEV W/O PSY	3094	ADJ DIS-EMOTION/CONDUCT	30420	COCAINE DEPEND-UNSPEC
29644	BIPOL I MANIC-SEV W PSY	30981	POSTTRAUMATIC STRESS DIS	30430	CANNABIS DEPEND-UNSPEC
29650	BIPOL I CUR DEPRES NOS	30989	ADJUSTMENT REACTION NEC	30440	AMPHETAMIN DEPEND-UNSPEC
29653	BIPOL I CURR DEP W/O PSY	3099	ADJUSTMENT REACTION NOS	30460	DRUG DEPEND NEC-UNSPEC
29660	BIPOL I CURRNT MIXED NOS	311	DEPRESSIVE DISORDER NEC	30470	OPIOID/OTHER DEP-UNSPEC
29664	BIPOL I CUR MIXED W PSY	31234	INTERMITT EXPLOSIVE DIS	30480	COMB DRUG DEP NEC-UNSPEC
29665	BIPOL I CUR MIX-PART REM	31282	CNDCT DSRDR ADLSCNT ONST	30490	DRUG DEPEND NOS-UNSPEC
2967	BIPOLOR I CURRENT NOS	31381	OPPOSITION DEFIANT DISOR	30500	ALCOHOL ABUSE-UNSPEC
29680	BIPOLAR DISORDER NOS	31400	ATTN DEFIC NONHYPERACT	30501	ALCOHOL ABUSE-CONTINUOUS
29682	ATYPICAL DEPRESSIVE DIS			30520	CANNABIS ABUSE-UNSPEC
29689	BIPOLAR DISORDER NEC			30521	CANNABIS ABUSE-CONTIN
29690	EPISODIC MOOD DISORD NOS			30530	HALLUCINOG ABUSE-UNSPEC
29699	EPISODIC MOOD DISORD NEC			30540	SED,HYP,ANXIOLYTC AB-NOS
2970	PARANOID STATE, SIMPLE			30550	OPIOID ABUSE-UNSPEC
2989	PSYCHOSIS NOS			30560	COCAINE ABUSE-UNSPEC
30000	ANXIETY STATE NOS			30570	AMPHETAMINE ABUSE-UNSPEC
30001	PANIC DIS W/O AGORPHOBIA			30590	DRUG ABUSE NEC-UNSPEC

Source: TriWest JSOPP, 24 June 2009

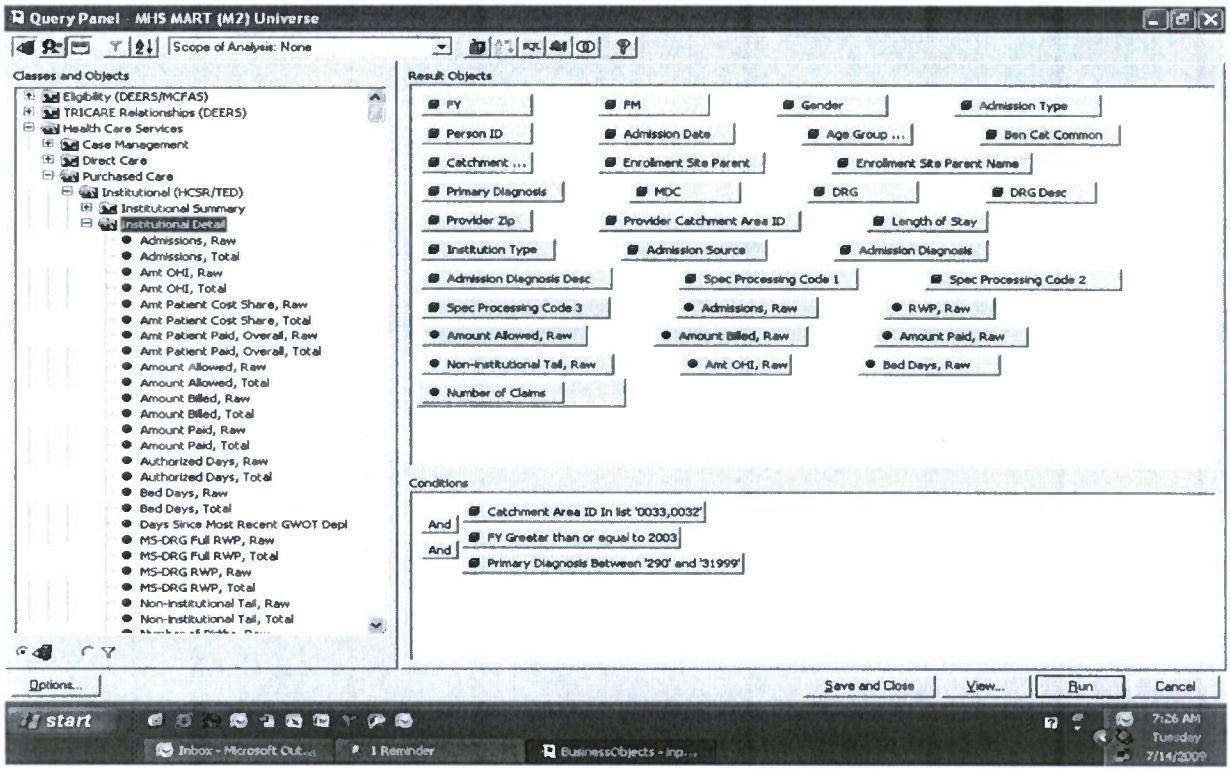
H.3. Annex C

Ft. Carson Military Population Auth, as of 12 Jun 09



H.3. Annex D

M2 Screen Print of Purchased Care Inpatient Mental Health



H.4. Annex E.

List of Acronyms

ABH – Acute Behavioral Health

ACE – Ask, Care, Escort

AD – Active Duty

ADFM – Active Duty Family Member

ADSM – Active Duty Service Member

AFAP – Army Family Advocacy Program

ANA – American Nurses Association

APU – Acute Psychiatry Unit

ASAP – Army Substance Abuse Program

BCA – Business Case Analysis

BDOC – Bed days of Care

BOG – Board of Governors

BRAC – Base Realignment and Closure

COA – Course of Action

COB – Civilians on Battlefield

CMAC – Champus Maximum Allowable Charge

CPOL – Civilian Personnel Online

CRDAMC – Carl R. Darnall Army Medical Center

CSM – Command Sergeant Major

CTVHCS – Central Texas Veteran Health Care System

DHP – Defense Health Plan

DoD – Department of Defense

EACH – Evans Army Community Hospital

EAS IV – Expense Accounting System (Version IV)

ED – Emergency Department

FY – Fiscal Year

GS – Government Service

GTA – Grow the Army

GWOT – Global War on Terrorism

HFPA – Health Facility Planning Agency

JSOPP – Joint Strategic and Operational Planning Process

LMHC – Licensed Mental Health Counselors

LOS – Line of Sight

LPC – Licensed Professional Counselors

LTG – Lieutenant General

M2 – Military Health System Mart

MHS – Military Health System

MOA – Memorandum of Agreement

MSMO- Multi Service Market Office

MTF – Military Treatment Facility

NPV – Net Present Value

OEF/OIF – Operation Enduring Freedom/Operation Iraqi Freedom

OMB – Office of Management and Budget

PCM – Primary Care Manager

PICU – Psychiatric Intensive Care Unit

PNA – Psychiatric Nursing Assistant

PPMD – Portfolio Planning & Management Division

ROFR – Right of First Refusal

ROI – Return on Investment

RTC – Residential Treatment Center

SA – Substance Abuse

SFCC – Soldier Family Care Clinic

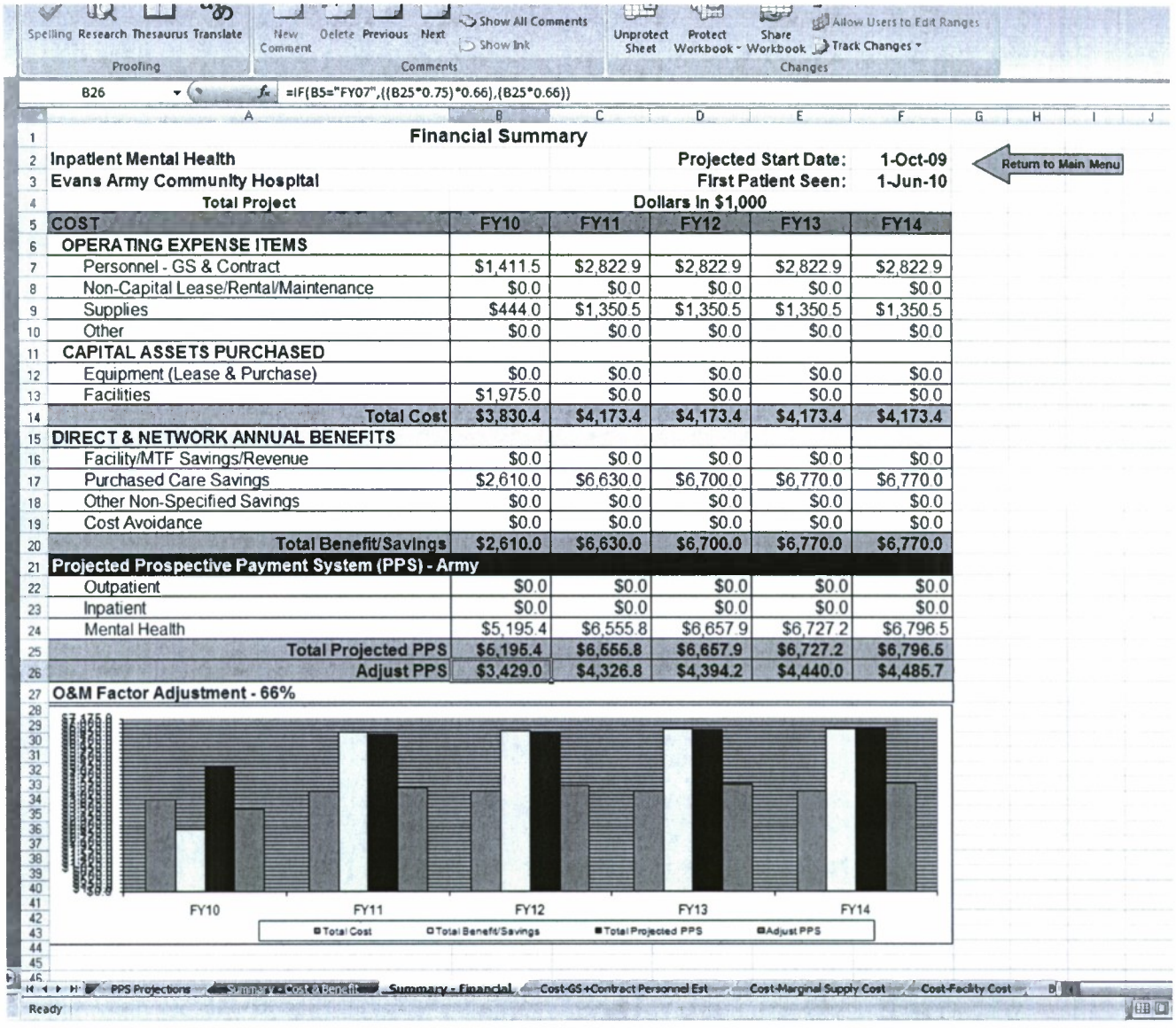
TMA – TRICARE Management Activity

TRO – TRICARE Regional Office

WMSN – Workload management system for nursing

VHA – Veteran Health Administration

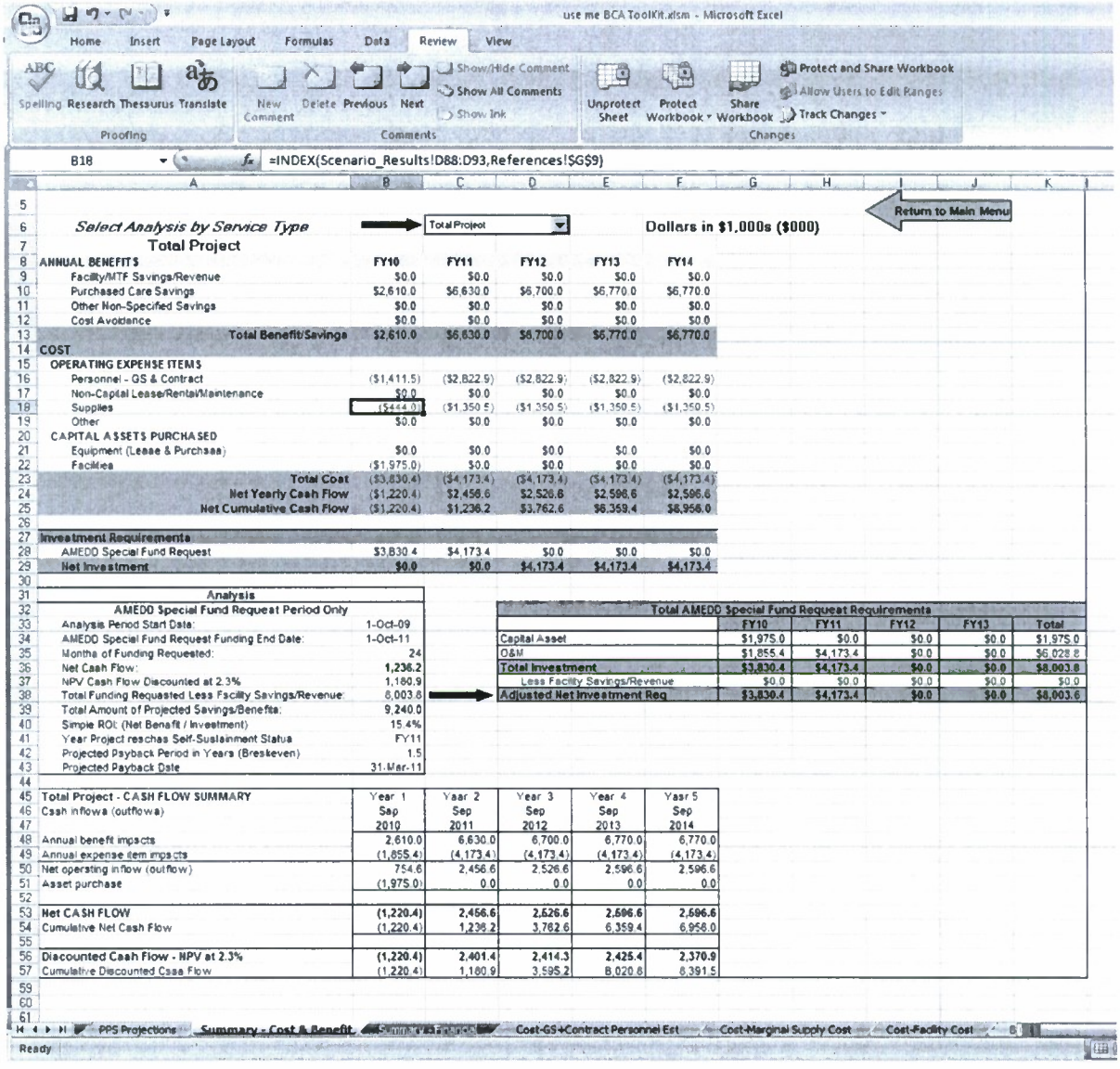
H.5. Annex F. Financial Summary Data – Recapture of Active Duty



Financial Summary

Inpatient Mental Health			Projected Start Date:		1-Oct-09
Evans Army Community Hospital			First Patient Seen:		1-Jun-10
Total Project			Dollars in $1,000		
COST	FY10	FY11	FY12	FY13	FY14
OPERATING EXPENSE ITEMS					
Personnel - GS & Contract	$1,411.5	$2,822.9	$2,822.9	$2,822.9	$2,822.9
Non-Capital Lease/Rental/Maintenance	$0.0	$0.0	$0.0	$0.0	$0.0
Supplies	$444.0	$1,350.5	$1,350.5	$1,350.5	$1,350.5
Other	$0.0	$0.0	$0.0	$0.0	$0.0
CAPITAL ASSETS PURCHASED					
Equipment (Lease & Purchase)	$0.0	$0.0	$0.0	$0.0	$0.0
Facilities	$1,975.0	$0.0	$0.0	$0.0	$0.0
Total Cost	$3,830.4	$4,173.4	$4,173.4	$4,173.4	$4,173.4
DIRECT & NETWORK ANNUAL BENEFITS					
Facility/MTF Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Purchased Care Savings	$2,610.0	$6,630.0	$6,700.0	$6,770.0	$6,770.0
Other Non-Specified Savings	$0.0	$0.0	$0.0	$0.0	$0.0
Cost Avoidance	$0.0	$0.0	$0.0	$0.0	$0.0
Total Benefit/Savings	$2,610.0	$6,630.0	$6,700.0	$6,770.0	$6,770.0
Projected Prospective Payment System (PPS) - Army					
Outpatient	$0.0	$0.0	$0.0	$0.0	$0.0
Inpatient	$0.0	$0.0	$0.0	$0.0	$0.0
Mental Health	$5,195.4	$6,555.8	$6,657.9	$6,727.2	$6,796.5
Total Projected PPS	$5,195.4	$6,555.8	$6,657.9	$6,727.2	$6,796.5
Adjust PPS	$3,429.0	$4,326.8	$4,394.2	$4,440.0	$4,485.7
O&M Factor Adjustment - 66%					

H.6. Annex G. Cash Flow Summary – Recapture of Active Duty



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B18 =INDEX(Scenario_Results!D88:D93,References!$G$9)

Return to Main Menu

Select Analysis by Service Type → Total Project

Total Project

Dollars in $1,000s ($000)

ANNUAL BENEFITS	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Purchased Care Savings	$2,610.0	$6,630.0	$6,700.0	$6,770.0	$6,770.0
Other Non-Specified Savings	$0.0	$0.0	$0.0	$0.0	$0.0
Cost Avoidance	$0.0	$0.0	$0.0	$0.0	$0.0
Total Benefit/Savings	$2,610.0	$6,630.0	$6,700.0	$6,770.0	$6,770.0
COST					
OPERATING EXPENSE ITEMS					
Personnel - GS & Contract	($1,411.5)	($2,822.9)	($2,822.9)	($2,822.9)	($2,822.9)
Non-Capital Lease/Rental/Maintenance	$0.0	$0.0	$0.0	$0.0	$0.0
Supplies	($444.0)	($1,350.5)	($1,350.5)	($1,350.5)	($1,350.5)
Other	$0.0	$0.0	$0.0	$0.0	$0.0
CAPITAL ASSETS PURCHASED					
Equipment (Lease & Purchase)	$0.0	$0.0	$0.0	$0.0	$0.0
Facilities	($1,975.0)	$0.0	$0.0	$0.0	$0.0
Total Cost	($3,830.4)	($4,173.4)	($4,173.4)	($4,173.4)	($4,173.4)
Net Yearly Cash Flow	($1,220.4)	$2,456.6	$2,526.6	$2,596.6	$2,596.6
Net Cumulative Cash Flow	($1,220.4)	$1,236.2	$3,762.6	$6,359.4	$8,956.0
Investment Requirements					
AMEDD Special Fund Request	$3,830.4	$4,173.4	$0.0	$0.0	$0.0
Net Investment	$0.0	$0.0	$4,173.4	$4,173.4	$4,173.4

Analysis	
AMEDD Special Fund Request Period Only	
Analysis Period Start Date:	1-Oct-09
AMEDD Special Fund Request Funding End Date:	1-Oct-11
Months of Funding Requested:	24
Net Cash Flow:	1,236.2
NPV Cash Flow Discounted at 2.3%	1,180.9
Total Funding Requested Less Facility Savings/Revenue:	8,003.6
Total Amount of Projected Savings/Benefits:	9,240.0
Simple ROI: (Net Benefit / Investment)	15.4%
Year Project reaches Self-Sustainment Status	FY11
Projected Payback Period in Years (Breakeven)	1.5
Projected Payback Date	31-Mar-11

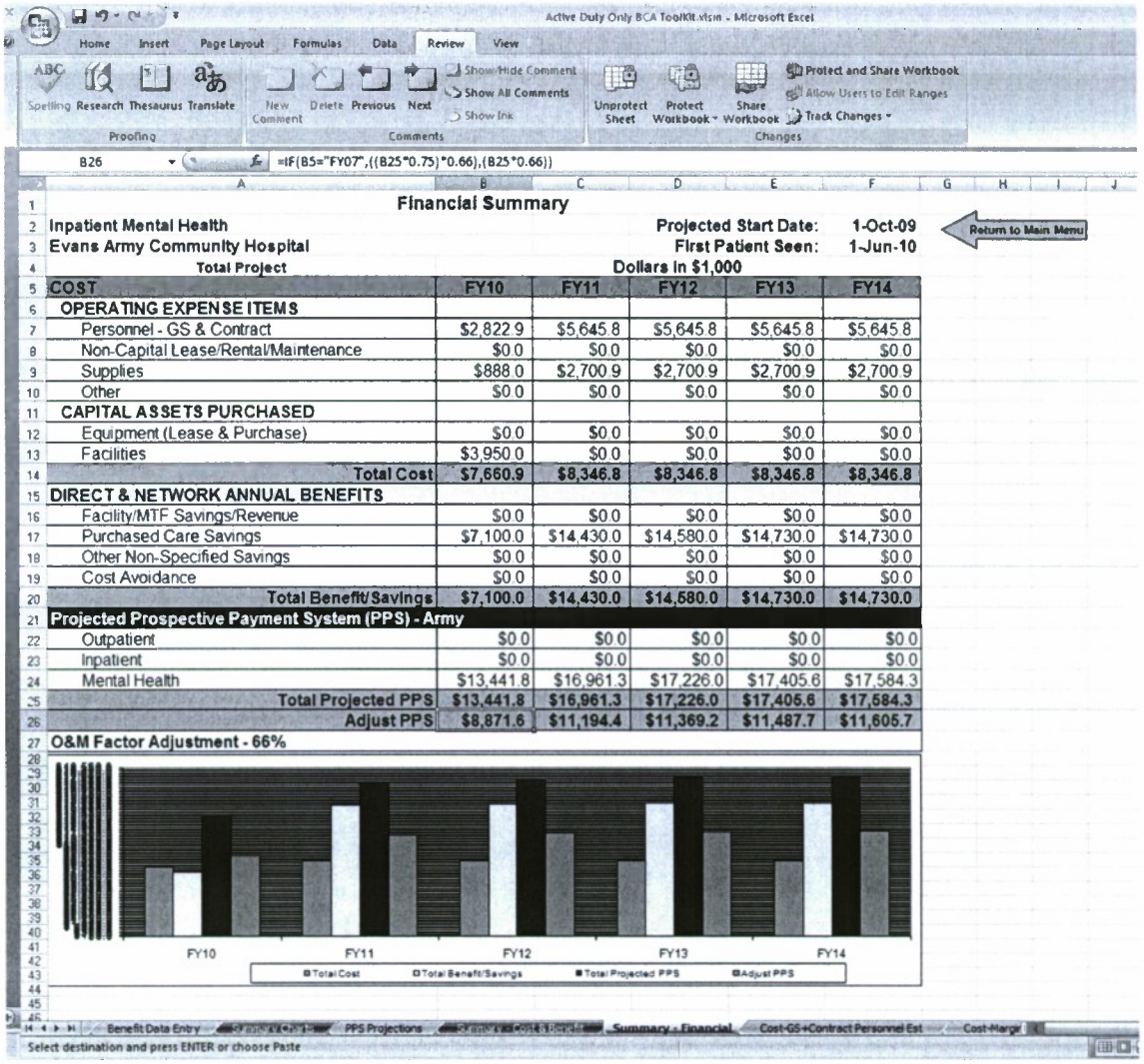
Total AMEDD Special Fund Request Requirements	FY10	FY11	FY12	FY13	Total
Capital Asset	$1,975.0	$0.0	$0.0	$0.0	$1,975.0
O&M	$1,855.4	$4,173.4	$0.0	$0.0	$6,028.8
Total Investment	$3,830.4	$4,173.4	$0.0	$0.0	$8,003.8
Less Facility Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Adjusted Net Investment Req	$3,830.4	$4,173.4	$0.0	$0.0	$8,003.6

Total Project - CASH FLOW SUMMARY Cash inflows (outflows)	Year 1 Sep 2010	Year 2 Sep 2011	Year 3 Sep 2012	Year 4 Sep 2013	Year 5 Sep 2014
Annual benefit impacts	2,610.0	6,630.0	6,700.0	6,770.0	6,770.0
Annual expense item impacts	(1,855.4)	(4,173.4)	(4,173.4)	(4,173.4)	(4,173.4)
Net operating inflow (outflow)	754.6	2,456.6	2,526.6	2,596.6	2,596.6
Asset purchase	(1,975.0)	0.0	0.0	0.0	0.0
Net CASH FLOW	**(1,220.4)**	**2,456.6**	**2,526.6**	**2,596.6**	**2,596.6**
Cumulative Net Cash Flow	(1,220.4)	1,236.2	3,762.6	6,359.4	8,956.0
Discounted Cash Flow - NPV at 2.3%	**(1,220.4)**	**2,401.4**	**2,414.3**	**2,425.4**	**2,370.9**
Cumulative Discounted Cash Flow	(1,220.4)	1,180.9	3,595.2	6,020.6	8,391.5

PPS Projections | Summary - Cost & Benefit | Cost-GS+Contract Personnel Est | Cost-Marginal Supply Cost | Cost-Facility Cost

Ready

H.7. Annex H. Financial Summary Data – Recapture of all TRICARE enrolled



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Proofing | Comments | Changes

B26 =IF(B5="FY07",((B25*0.75)*0.66),(B25*0.66))

Financial Summary

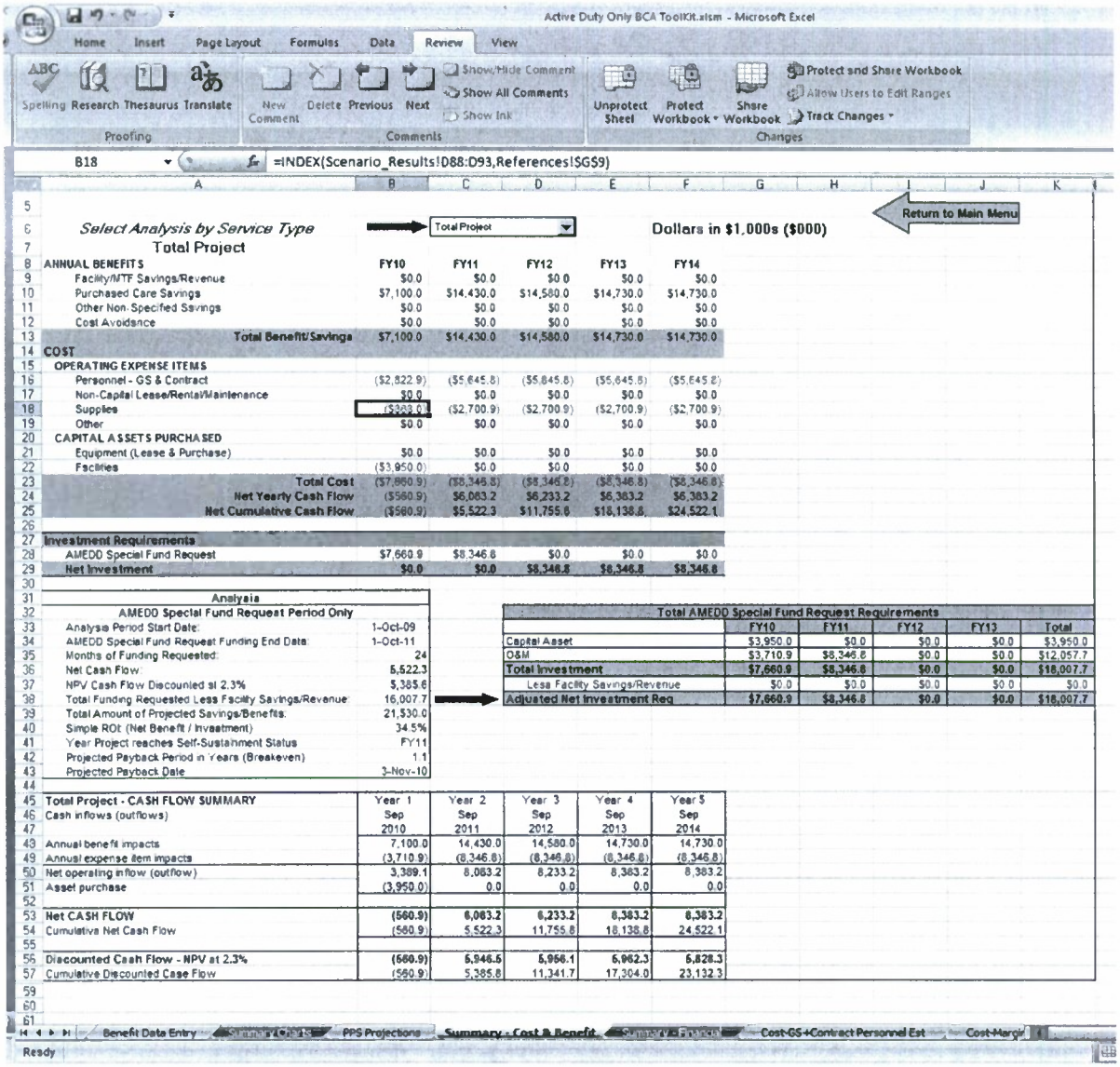
2	**Inpatient Mental Health**				**Projected Start Date:**	**1-Oct-09**
3	**Evans Army Community Hospital**				**First Patient Seen:**	**1-Jun-10**
4	**Total Project**				**Dollars in $1,000**	
5	**COST**	**FY10**	**FY11**	**FY12**	**FY13**	**FY14**
6	**OPERATING EXPENSE ITEMS**					
7	Personnel - GS & Contract	$2,822.9	$5,645.8	$5,645.8	$5,645.8	$5,645.8
8	Non-Capital Lease/Rental/Maintenance	$0.0	$0.0	$0.0	$0.0	$0.0
9	Supplies	$888.0	$2,700.9	$2,700.9	$2,700.9	$2,700.9
10	Other	$0.0	$0.0	$0.0	$0.0	$0.0
11	**CAPITAL ASSETS PURCHASED**					
12	Equipment (Lease & Purchase)	$0.0	$0.0	$0.0	$0.0	$0.0
13	Facilities	$3,950.0	$0.0	$0.0	$0.0	$0.0
14	**Total Cost**	**$7,660.9**	**$8,346.8**	**$8,346.8**	**$8,346.8**	**$8,346.8**
15	**DIRECT & NETWORK ANNUAL BENEFITS**					
16	Facility/MTF Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
17	Purchased Care Savings	$7,100.0	$14,430.0	$14,580.0	$14,730.0	$14,730.0
18	Other Non-Specified Savings	$0.0	$0.0	$0.0	$0.0	$0.0
19	Cost Avoidance	$0.0	$0.0	$0.0	$0.0	$0.0
20	**Total Benefit/Savings**	**$7,100.0**	**$14,430.0**	**$14,580.0**	**$14,730.0**	**$14,730.0**
21	**Projected Prospective Payment System (PPS) - Army**					
22	Outpatient	$0.0	$0.0	$0.0	$0.0	$0.0
23	Inpatient	$0.0	$0.0	$0.0	$0.0	$0.0
24	Mental Health	$13,441.8	$16,961.3	$17,226.0	$17,405.6	$17,584.3
25	**Total Projected PPS**	**$13,441.8**	**$16,961.3**	**$17,226.0**	**$17,405.6**	**$17,584.3**
26	**Adjust PPS**	**$8,871.6**	**$11,194.4**	**$11,369.2**	**$11,487.7**	**$11,605.7**
27	**O&M Factor Adjustment - 66%**					

Return to Main Menu

Benefit Data Entry | PPS Projections | Summary - Financial | Cost-GS+Contract Personnel Est | Cost-Margin

Select destination and press ENTER or choose Paste

H.8. Annex I. Cash Flow Summary – Recapture of all TRICARE enrolled



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Proofing | Comments | Changes

B18 =INDEX(Scenario_Results!D88:D93,References!$G$9)

Return to Main Menu

Select Analysis by Service Type → Total Project

Dollars in $1,000s ($000)

Total Project

ANNUAL BENEFITS	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Purchased Care Savings	$7,100.0	$14,430.0	$14,580.0	$14,730.0	$14,730.0
Other Non-Specified Savings	$0.0	$0.0	$0.0	$0.0	$0.0
Cost Avoidance	$0.0	$0.0	$0.0	$0.0	$0.0
Total Benefit/Savings	$7,100.0	$14,430.0	$14,580.0	$14,730.0	$14,730.0
COST					
OPERATING EXPENSE ITEMS					
Personnel - GS & Contract	($2,822.9)	($5,645.8)	($5,645.8)	($5,645.8)	($5,645.8)
Non-Capital Lease/Rental/Maintenance	$0.0	$0.0	$0.0	$0.0	$0.0
Supplies	($363.0)	($2,700.9)	($2,700.9)	($2,700.9)	($2,700.9)
Other	$0.0	$0.0	$0.0	$0.0	$0.0
CAPITAL ASSETS PURCHASED					
Equipment (Lease & Purchase)	$0.0	$0.0	$0.0	$0.0	$0.0
Facilities	($3,950.0)	$0.0	$0.0	$0.0	$0.0
Total Cost	($7,660.9)	($8,346.8)	($8,346.8)	($8,346.8)	($8,346.8)
Net Yearly Cash Flow	($560.9)	$6,083.2	$6,233.2	$6,383.2	$6,383.2
Net Cumulative Cash Flow	($560.9)	$5,522.3	$11,755.6	$18,138.8	$24,522.1
Investment Requirements					
AMEDD Special Fund Request	$7,660.9	$8,346.8	$0.0	$0.0	$0.0
Net Investment	$0.0	$0.0	$8,346.8	$8,346.8	$8,346.8

Analysis	
AMEDD Special Fund Request Period Only	
Analysis Period Start Date:	1-Oct-09
AMEDD Special Fund Request Funding End Date:	1-Oct-11
Months of Funding Requested:	24
Net Cash Flow:	5,522.3
NPV Cash Flow Discounted at 2.3%	5,385.6
Total Funding Requested Less Facility Savings/Revenue:	16,007.7
Total Amount of Projected Savings/Benefits:	21,530.0
Simple ROI (Net Benefit / Investment)	34.5%
Year Project reaches Self-Sustainment Status	FY11
Projected Payback Period in Years (Breakeven)	1.1
Projected Payback Date:	3-Nov-10

Total AMEDD Special Fund Request Requirements	FY10	FY11	FY12	FY13	Total
Capital Asset	$3,950.0	$0.0	$0.0	$0.0	$3,950.0
O&M	$3,710.9	$8,346.8	$0.0	$0.0	$12,057.7
Total Investment	$7,660.9	$8,346.8	$0.0	$0.0	$16,007.7
Less Facility Savings/Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Adjusted Net Investment Req	$7,660.9	$8,346.8	$0.0	$0.0	$16,007.7

Total Project - CASH FLOW SUMMARY Cash inflows (outflows)	Year 1 Sep 2010	Year 2 Sep 2011	Year 3 Sep 2012	Year 4 Sep 2013	Year 5 Sep 2014
Annual benefit impacts	7,100.0	14,430.0	14,580.0	14,730.0	14,730.0
Annual expense item impacts	(3,710.9)	(8,346.8)	(8,346.8)	(8,346.8)	(8,346.8)
Net operating inflow (outflow)	3,389.1	8,083.2	8,233.2	8,383.2	8,383.2
Asset purchase	(3,950.0)	0.0	0.0	0.0	0.0
Net CASH FLOW	**(560.9)**	**6,083.2**	**8,233.2**	**8,383.2**	**8,383.2**
Cumulative Net Cash Flow	(560.9)	5,522.3	11,755.6	18,138.8	24,522.1
Discounted Cash Flow - NPV at 2.3%	**(560.9)**	**5,946.5**	**5,956.1**	**6,062.3**	**6,828.3**
Cumulative Discounted Case Flow	(560.9)	5,385.6	11,341.7	17,304.0	23,132.3

Benefit Data Entry | PPS Projections | Summary - Cost & Benefit | Cost-GS+Contract Personnel Est | Cost-Margin

Ready

H.9. Annex J. Potential recapture based on percentage of work-load recaptured

Scenario 2: Potential return on investment at given worlk-load recapture percentage

FY	Troops	Paid	Sum of Bed Days	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net @100%	Net @90%	Net @80%	Net @70%	Net @60%	Net @50%
2008	19000	4.9	6630	0	0	0	4.9	0	0	0	0	0	0	0
2009	19973	5.17	6970	0	0	0	5.17	0	0	0	0	0	0	0
2010	25203	6.53	8795	2.488	1.98	444K	4.912	2.61						
2011	25597	6.63	8932	2.488	0	1.35m	3.838	6.635	2.79	2.1335	1.47	0.8065	0.143	
2012	25864	6.7	9025	2.488	0	1.35m	3.838	6.7	2.86	2.192	1.522	0.852	0.182	
2013	26129	6.77	9118	2.488	0	1.35m	3.838	6.77	2.93	2.255	1.578	0.901	0.224	
2014	26129	6.77	9118	2.488	0	1.35m	3.838	6.77	2.93	2.255	1.578	0.901	0.224	

Scenario 3: Potential return on investment at given worlk-load recapture percentage

FY	Troops	Paid	Sum of Bed Days	Staff Cost	Facility Renovation Cost	Yearly Supply Cost	Spent	Earned	Net @100%	Net @90%	Net @80%	Net @70%	Net @60%	Net @50%
2008	19000	10.71	17151	0	0	0	10.71	0	0	0	0	0	0	0
2009	19973	11.25	18029	0	0	0	11.25	0	0	0	0	0	0	0
2010	25203	14.2	22750	4.97	3.96	888K	9.818	7.1						
2011	25597	14.43	23106	4.97	0	2.70m	7.67	14.43	6.76	5.317	3.874	2.431	0.988	
2012	25864	14.58	23347	4.97	0	2.70m	7.67	14.58	6.91	5.452	3.994	2.536	1.078	
2013	26129	14.73	23586	4.97	0	2.70m	7.67	14.73	7.06	5.587	4.114	2.641	1.168	
2014	26129	14.73	23586	4.97	0	2.70m	7.67	14.73	7.06	5.587	4.114	2.641	1.168	